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Addresses and Original Communications.**ACUTE ABDOMINAL CRISES; THEIR DIFFERENTIAL DIAGNOSIS.***

BY HUGO O. PANTZER, A. M., M. D., PROFESSOR OF CLINICAL DISEASES OF WOMEN IN THE INDIANA UNIVERSITY SCHOOL OF MEDICINE, INDIANAPOLIS, INDIANA.

The term, acute abdominal crises, is meant to designate the sudden augmentation of pre-existing abdominal diseases by which these are transformed into grave consequent conditions, often creating entirely new disease entities. For example, such changes occur when a subacute or chronic appendicitis suddenly is followed by perforation and peritonitis; when a tumor of the colon eventuates in acute obstruction; when a tubal pregnancy ruptures; or when a pathologic adhesion of the bowel develops a twisting of this organ or its mesentery. The term also includes the acute abdominal distress following the dislocation of an organ where, in turn, adjacent or correlated organs are affected, as when angulation of the ureter of a floating kidney is followed by hydro-nephrosis and colic; or when the displaced uterus presses upon the ovary and an acute tympanites is engendered.

By a different etiology, but naturally associated with this subject, are the interesting abdominal phenomena resulting from disease of remote organs where the pre-eminence of the abdominal symptoms for the while obscures the real disease. This occurs at the initial stage of a pneumonia when the

diaphragmatic distress is projected into the lower abdomen, and pain in the ileo-caecal region may suggest appendiceal or pelvic peritonitis; or when in an uremia a sudden epigastric pain is developed.

The acuity of suffering in these cases calls for quick relief. The need to apply the differential remedy, lest life may be jeopardized, marks a serious difficulty. These considerations make imperative the occasional reconsideration of the subject. This is the ostensible ground for proposing the discussion of this subject on this propitious occasion. The remarks I will make shall pertain to a few points in the differential diagnosis of these affections. They will serve as an introduction, leaving it to others here to bring out other phases of this important subject.

The conditions found in acute abdominal crises may be enumerated under the two heads above indicated, namely: 1. Cases where pre-existing abdominal diseases develop acute consequent stages, or new diseases. 2. Cases where systemic conditions (toxæmia) or extra-abdominal diseases eventuate in acute abdominal suffering.

A brief list of the conditions which give rise to acute abdominal crises will serve to reveal comprehensively the multiple affections that come in question. The first group includes:

Acute appendicitis, with or without perforation; rupture of an ectopic gestation; rupture of a pyosalpinx or pyo-ovarium; strangulation of a hernia at one of the rings; perforation following gastro-duodenal or intestinal ulceration; torsion of the pedicle of an ovarian or uterine tumor; rupture of an ovarian cyst; twisting, angulation or intussusception of a bowel or its mesen-

tery, as connected with inflammatory adhesions of the bowel or omentum, or with enteroptosis; intestinal obstructions by tumors of the intestine, or neighboring organs, by fecal impaction, worms, enteroliths, gall-stones; bilious colic from cholecystitis, with or without stones; perforation of gall-bladder following gall-stones or perforative inflammatory or gangrenous changes; rupture of hydrops of the gall-bladder; renal colic with stones, or with hydro- or pyo-nephrosis; pancreatic colic with acute inflammation or hemorrhage associated with or without stones, pancreatic gangrene; acute crises owing to enteroptosis (uterus, kidney, colon, stomach, liver, spleen); acute crises of pyloric stenosis owing to tumor or ulcerative changes, or to congenital atresia; acute gastric or duodenal dilatation following angulation of superior mesenteric artery; rare forms of intra-abdominal hernia, diaphragmatic, dudeno-jejunal, *intersigmoid*, or hernia through the foramen of Winslow; obstruction of Meckel's diverticulum.

The second group though small in number, on account of the possibility of grave erring, is none the less important. It includes amongst others loxaemic (uraemic) epigastralgia; reflex pain—as when an initial pneumonia projects pain into abdomen, Embolism of the superior mesenteric artery or thrombosis of veins.

All this is a bewildering array of possible causes. It appears the more formidable for having in most instances a very similar symptomatology. Sudden seizure with abdominal pain, shock, nausea and vomiting are present in practically all cases.

Happily in the individual case, this number can quickly be reduced to a few possible or probable causes. Obviously if the patient be a male, there are eliminated from consideration at once the many possibilities pertaining specially to the female. Ruptured ectopic gestation, ruptured pyosalpinx, pyoovarian, or ovarian cyst, twisted

pedicle or ovarian or uterine tumors, prolapsed uterus or ovaries, etc. are at once counted out.

The methodical consideration of (1.) The previous history as bearing on abdominal diseased conditions; (2.) The immediate prodromic symptoms and conditions; (3.) The site of the greatest pain, primary and secondary; (4.) The presence or not, of inflammation, will commonly provide the important clews.

These clews by correct methods of physical examination in turn will lead at least to a practical diagnosis. An accurate anatomic and pathologic diagnosis is the ideal goal. Its attainment in many instances, for some time to come, will remain a pious wish. The recognition of the unusual case, most times will be reserved to the skill of the specialist. And he often will have to rest contented with its recognition and proper treatment when the abdomen lies open before him. However, we can not but realize that patient and methodical effort alone can accomplish the best, and that striving for it not only is duty, but it makes for greater proficiency and lends increased zest to our work.

Previous history. The mentioning of the various causes that produce acute abdominal crises revealed that practically all kinds have previous diseased conditions. *This means that there have been antecedent symptoms.* These must be brought out by our investigation. Their critical consideration may and will at once put under suspicion one organ, or several as likely involved. This organ or these organs severally should be in mind during the subsequent investigation. The data successively obtained will either substantiate the suspicion, make it less likely, or rule it out entirely. In time each organ in question is specifically regarded in its possible connection with all the symptoms and signs as they are successively developed. This method may be more definitely designated as *differentiation by organs*. Thus dysmenor-

rhea, sterility, abortions, pelvic diseases, etc., will refer definitely to the genitalia, or colic, anorexia, constipation; tympany, etc., to the intestines and stomach. Likewise other organs, singly, may be associated with given symptoms. The scrutiny of the patient while making these investigations, will show physical evidences, which are found to be correlated with the symptoms previously elicited. Deductions may be drawn at once. Thus deficiency of development will suggest enteroptosis; the variable conditions of skin (dry, dark, yellowish or leaky skin), will have special significance. This evidence should at once be differentially aligned with the possibilities or probabilities previously entertained.

Precursory Phenomena—The conditions, occurrences and symptoms immediately preceding the attack are next elicited. They should be critically considered, most especially with regard to a differentiation by organs or at least the part of the abdomen in which they manifest themselves. Thus, for example, in a patient who has recently noticed in her person an increase of size of abdomen, accompanied with spamenorrhea, or dragging in the lower parts, barring pregnancy, may be possessed of a tumor twisted on its pedicle. This is the more likely if she can remember having had the sensation of something falling from side to side as she turned in bed. Or a case with a history of bladder irritability, backache in the region of a kidney, bloody or purulent urine, may discover stone or hydro-nephrosis as the cause of a renal colic. Or symptoms of gastric or intestinal disturbances will more specifically point to the gall-bladder, duodenum, pancreas or stomach. All such information will be correlated with the differential organic data so far collected. It may considerably favor a probability, or quite unsettle previous deductions with regard to certain organs or conditions.

The Site of Greatest Primary or Secondary Pain—This may give very definite direction as to the locality involved. The character of pain, whether sharp, burning, aching or colicky, continuous or intermittent, will be helpful in further differentiating the organs or the part of the abdomen involved. The sharp pain of peritoneal inflammation, also burning where associated with adhesions between organs that are moved one upon the other; the griping, sickening pain of intra-intestinal disturbance; the intermittent ache of renal or gall-bladder colic, etc., each has special significance or color bearing on the organ or locality involved. For example, appendicitis in most instances is a disease of chronic development. The pains of the pre-perforative stage are quite usually referred to the ileo-caecal region. Even the perforation often is felt localized in this locality. At all events, the previous history of tenderness, pain or colic in this region, associated with a sudden attack of diffuse pain through the lower abdomen, conduce to the thought of appendicitis.

Presence or Not of Febrile Temperature—Most important is the determination that a given case at the beginning has or has not elevation of temperature. This can be easily and definitely established and has crucial bearing on the question of diagnosis. There may be no evidence of temperature to the touch, the thermometer in the mouth at the stage of onset may show none, but commonly the rectum will reveal temperature in practically all cases of abdominal inflammatory disease. A hypernormal temperature found in a given case practically throws out (excepting as an unusual complication) all the pathologic conditions not of inflammatory causation. Ectopic pregnancy, gastric or duodenal perforation, torsion of ovarian pedicle, angulation or twisting of bowels, strangulated hernia, acute dislocation of other abdominal or pelvic organs, bilious or renal colic where owing to stone without co-existing infection, and many other

causes at once are practically ruled out. When temperature is found at the early stage, the inflammatory character of the disease is at once declared. The fact that about 35 per cent. of all abdominal crises are owing to appendicitis, and that of all cases attended with fever this organ is affected in about 75 per cent. or more of all cases, at once directs attention to it. With the data previously obtained, a diagnosis of appendicitis looms up as a strong probability and yet no local physical examination has been made. The differential temperature in some of these cases is truly surprising. Two and three degrees more by rectum than mouth is not infrequently found. This indicates that the seat of inflammatory activity is nearer to the anus than to the mouth. Thus, in pelvic or appendiceal inflammatory involvement the rectal temperature shows higher, whereas in liver or gall-bladder cases the temperature of mouth and rectum will be nearly the same. A high oral temperature, with little or no elevation in the rectum, may at once indicate disease away from the abdomen. This finding becomes of great interest in those cases where a pneumonia at its inception has pain reflected into the abdomen, simulating appendicitis. Cases where the oral temperature is two degrees or more above the rectal, point to a supra-diaphragmatic location of the disease, even though the symptoms and signs refer to the lower abdomen. A prominent internist of Chicago some ten years ago reported a case where an operation for appendicitis showed no disease of the appendix; two days later pneumonia was discovered. Such unfortunate and humiliating experiences may be averted by taking the temperature by mouth and by rectum. This matter of differential temperature has found little consideration in literature. Text books commonly fail to speak of it. The writer has in his special cases (abdominal and pelvic diseases), especially after operation with febrile course, found the rectum to indicate so much nearer the actual de-

gree of inflammation, that he has the temperature invariably taken at both extremities of the body. This procedure has proved useful particularly in cases shortly after an abdominal operation when temperatures give great concern. In several instances, a high oral temperature accompanied by a low pelvic registration led to finding a tonsillitis which was the sole cause for the fever. Since 1892 the writer has pursued this course. It has served steadily to confirm his views of the great diagnostic value of this practice.

A word here about the introduction of the thermometer into the rectum. I have frequently observed physicians and nurses who had difficulty introducing the instrument, and who gave pain doing so. This can easily be avoided by observing a few points. The examining hands must be warm. The tip of the finger and the anal pit should be thoroughly lubricated. The finger nails must have no ragged edges. No force is required. Ostentatious gentleness of manipulation must be displayed from the first and throughout. The introduction of the thermometer can be made with exposure of the part, or equally well under cover. The tip of the finger having located the central pit of the anus, the thermometer previously held in the hand, is at once placed opposite. The patient is told to strain down gently; then to relax. With the last the point of the thermometer is gently pressed upward, which, in following the receding bowel, is naturally carried along the tract. The S-form of the lower rectum should be borne in mind. The anus is advanced by the belt of levator musculature. Immediately above this point the rectum turns backward. This turn is particularly manifest in the young female under agitation. Where the parts are naturally much drawn, it is advisable to introduce the finger preceding the introduction of the instrument. Those not acquainted with this procedure will be agreeably surprised when they

note the ease with which this can be accomplished.

A case seen later than at the beginning of the acute attack may no longer have this simple reading as regards temperature. Several days after the onset a twisted or angulated bowel may have undergone intra-intestinal fermentation, or the intestinal wall gangrenous changes. These are attended with fever. In such case, other factors must be considered. The rapid pulse, the general failing, and chills of recent development, the time elapsed, are factors which may clearly indicate the secondary development of febrile changes.

In a given case by the evidence found before proceeding to the actual physical examination, we may have eliminated many possibilities quite fully. One or a few probabilities now call for special consideration.

Abdominal Palpation—Before proceeding to touch the abdomen, the appearance and attitude of the patient should be noted carefully and the exterior of the abdomen viewed. These may indicate quite definitely certain conditions. The pallor and sweating of the patient in shock from hemorrhage, the drawn limbs of the sufferer from intestinal perforation; the localized rigidity of the abdominal wall in circumscribed inflammatory affections; the intestinal turmoil in obstruction; and other striking features will at once afford observations for further correlation with previous suspicions of possible conditions. Finally when we come to actually examine the patient, we have in most instances reduced the possible causes to one or a few probable conditions, and we still hold in mind a few others as possibilities.

It becomes again necessary to assure the patient of gentlest touch: this more by our conduct than by words. Many patients by this time have become mentally interested in the investigation of their case and it is often surprising to what extent this mental occupation has eliminated excessive and inordinate ex-

pression of pain. Notably, where before some patients lay in a heap, rigidly drawn together, now singly the abdominal muscles are contracted or only a small well defined portion of them; or where entire limbs and toes were contracted, now one limb lies outstretched and relaxed, and the other only involves the muscles of the upper thigh. This partial elimination at once becomes differentially valuable. The circumscribed rigidity tells its own tale. Palpation done with finger tips prepared by warm-waterwashing, the tips pressed or touched most gently to the abdominal wall so as not to blunt or crush out the delicate cells that constitute our tactile sense, should now attempt to distinguish individual organs. Palpation had best be begun at a point away from the apparent seat of pain, and even while engaged in palpating the latter, it is well, under pain, to yet interchangingly palpate parts away. There should be noted the location and degree of rigidity, its constancy or not, over various parts; tenderness, its location and extent; the condition of the flanks, soft or rigid; points and form of abnormal resistance; evidences of peristalsis upon the abdominal wall, and other signs too well known to require mentioning.

Percussion must be made palpatory, when the abdomen is tender. This means that the tapping of the underlying finger is done with utmost gentleness, eliciting not the sound that is taken up by the ear, but the vibratory sensation which is imparted to the touch. To the trained finger this will easily discriminate not only between solid and hollow organs, but it will reveal thickening of the intestinal wall, or the dullness underlying a hollow viscus, as when an abscess underlies the caecum. Palpation and percussion properly performed need give little or no pain.

The notion is much prevalent that an examination of the abdomen while the patient, is in pain reveals little distinctive information. This, the

writer would contest. Examination of the abdomen after the methods just mentioned, will invariably reveal much important information. Continuous, patient practice of these methods will enable fine distinctions. As such, I would mention the recognition of tender non-adherent loops of bowels by the side of loops distinctly thickened and fixed; and in farther circle, organs that are non-tender, and having overlying them muscular structures that are soft. This is all changed by rough or painful examining. This at once converts the entire abdominal musculature into the hardness of a board. By contrast with this the delicate touch will often bring out the existence of a muscular rigidity in outline conforming minutely with the highly tender organ beneath. This phenomenon is particularly noticeable when the tender organ is mobile, i. e., not fixed by inflammatory adhesions, as for instance, at a nearly stage of an impending gangrene of the appendix. It may be here remarked that the practice of these refinements not only makes more expert in diagnosis but adds greatly to the interest of the task.

Auscultation, where obstruction of the bowel is likely, is of great importance. It can elicit the site, and degree of obstruction, as when sibilant intermittent sounds attend the passage of gases at a point where the lumen is narrowed. Friction murmurs may indicate the existence of inflammatory changes of the peritoneal covering of organs in motion. This examination may definitely corroborate the palpatory evidence on the expanse of the diseased area.

Obviously the foregoing is not a complete consideration of the subject. The time limitation on this occasion makes apology for this unnecessary. One part of the subject not referred to in the foregoing discussion requires specific mentioning. The simple primary acute gastric and intestinal diseases are often assumed to exist when they are not present. The consequent

delay in recognizing the true significance of the symptoms may have a disastrous bearing on the case. These simple cases should not be assumed without having carefully excluded the class of diseases more specifically considered in this paper.

Having found the remote history, the immediate history, the site of primary greatest pain; the differential temperature; having elicited the evidence of inspection, palpation, percussion and auscultation; and having in turn each bit of evidence as it came up, considered (1) singly with regard to previous diseases, and (2) differentially with regard to the drift of the preceding evidence and diagnostic possibilities, there will at this stage commonly be projected at least one or two diagnostic probabilities. These should also at once be considered with regard to indication for prognosis and therapy. There should result immediate definite decision and action. Many of these cases have an outspoken surgical tendency. Practically all, at some stage, call for the consideration of surgery. It should be regarded a good working rule in each case of acute gravity to call in a surgical consultant. Where a surgical recourse seems necessary, it may be well in anticipation of such to transport the patient at once to a hospital nearby. Later removal and even operation may be impossible, or if done then, be done too late.

*Read before the Hendricks County Medical Society at Danville, Ind., October 25, 1908, and before the Indianapolis Medical Society, December 15, 1908.

I would be true, for there are those who trust me;
I would be pure, for there are those who care;
I would be strong, for there is much to suffer;
I would be brave, for there is much to dare.
I would be friend of all—the foe—the friendless;
I would be giving and forget the gift,
I would be humble, for I know my weakness;
I would look up—and laugh—and love—and lift.

—Howard Arnold Walter.

EXCESSES IN SURGICAL CLEANLINESS.*

DR. MAYNARD A. AUSTIN, ANDERSON, INDIANA, ASSOCIATE PROFESSOR OF SURGERY, INDIANA UNIVERSITY SCHOOL OF MEDICINE, INDIANAPOLIS, IND.

During the last five years, I have had ample opportunity to prove that surgical cleanliness can be secured in practically every case, with a minor amount of effort and an absolute repudiation of the scrub brush. Formerly the scrub brush was an important part of my equipment. It has since been superseded by a piece of cotton or gauze, and the vigorous manipulation that abraded the skin can be looked upon with pity, and thought of only with regret.

In many hospitals much of the work done is on surgical patients brought to the clinic unprepared so far as the seat of the operation is concerned. The patient is shaved and cleansed upon the table. If the surgeon, whose hands are notoriously dirty can prepare them in ten or fifteen minutes, and can put them into any bodily wound with small chance of infection, how much better opportunity have we to gain a clean result when the seat of operation is never so dirty as our own hands.

I can look back and see many cases that I believe to have been infected directly by excessive cleanliness, that is the excessive scrubbing produced a *locus minoris resistantia* and the digging in the skin opened up and stimulated to growth pockets of bacteria that would have been innocuous under other circumstances. It requires several minutes' contact for alcohol, ether or carbolic acid to affect certain pathogenic bacteria and the time will undoubtedly come when our extraordinary manipulations will seem as crude as the application of iodoform. If we have an infected wound a little powder on the skin is not going to kill the infection. If we have an infected area on the outside a little ether or a little alcohol is not going to kill the germs in

the time it is usually allowed to remain; that is, it is commonly poured on and immediately wiped off.

After observing the work done in nearly every large clinic in the United States and Canada, watching operations by men without gloves, by men without gloves but with gloved assistants, and by gloved operators and gloved assistants and getting direct information as to the actual results following operations, I cannot feel any more safe with gloves than I do without them. If every one in the operation wears sterile gloves they certainly have an advantage in operations requiring other than the hands of the operator in the wound. Again it is advantageous for all hands to be gloved when one is not certain of the personal ability to obtain surgical cleanliness in one's assistants, when one is operating away from his customary surroundings.

A careless gloved hand will become infected as easily as one without and the operator without gloves who insists on his assistants wearing them, acknowledges their lack of training and his own perfection in detail.

All of us do not have the time, the means, or the opportunity to make such careful study as we should, in order to get an accurate knowledge of the true value of the so-called antiseptics; but we do have the time to read such an article as that of Dr. Harrington's published in the October number of the *Annals of Surgery*, 1904. Many persons seem to believe that we are capable of securing and maintaining an absolute degree of asepsis in our surgical work, and to proclaim different ideas than this might even provoke serious discussion.

A series of experiments was made by Dr. Harrington in the operating room. Sterile Petri dishes were placed in different portions of the room and near the field of operation. A dish that was exposed during the time needed to operate upon a case of hernia, and placed upon the instrument table showed that every square inch pro-

duced not less than one hundred and twenty organisms, chiefly pus cocci. If such a shower of bacteria constantly falls upon our table, our hands, our instruments and the field of operation, nature must be thanked for her assistance as much as our own efficiency when we secure a wound healed by primary intention.

Dr. Harrington also made some experiments in regard to the sterility of sweat. Sweat is considered one of the sources of infection that is tolerated by those who do not use gloves, and has been the main argument for those who do. Dr. Harrington makes this statement: "Six different times in my laboratory sweat has been made to flow from well cleaned and so far as is possible, sterilized forearms and hands, encased in sterile glass cylinders heated by appropriate means; and in not a single instance could a bacteria growth be obtained." He further made a series of experiments injecting fairly large amounts of sweat into animals subcutaneously, intravenously and into peritonically, and all proved negative. No one questions the fact of the presence of bacteria in the skin, yet they occur in the deeper as well as the more superficial layers, but most of those present are not pathogenic.

The chances of infection are far greater if one has an assistant or there are many observers to an operation who persist in talking or carrying on irrelevant conversation. The saliva is probably the richest source of infection with which we have to deal. Flugge, of Breslau, investigated this matter as thoroughly as Dr. Harrington investigated the matter of the skin cultures. "Ordinary conversation is accompanied by the constant ejection of salivary droplets, especially aggravated where consonants are numerous. In one series of experiments the average number of organisms per droplet of saliva as cast out in ordinary speech proved to be not less than 4375."

A number of other experiments by Dr. Harrington goes to show that our

chemical antiseptics as we use them are little more than a farce. The staphylococcus aureus and albus require ten minutes' contact with corrosive sublimate solution of a strength one to one thousand before they are destroyed. The above strength solution is as strong as it is safe to use, but no one would think of using it for ten minutes, which is the shortest time it could be used with any effectiveness. Five per cent. carbolic acid is impotent if used for less than two minutes. Five per cent. formaldehyde requires twenty minutes, while a saturated solution of permanganate of potash requires fifteen minutes for staphylococcus destruction.

Realizing the above facts to be correct and scientifically proven and on the other hand admitting that our surgery can be aseptic in its results, the resultant fact can not be other than our means and method are experimentally futile, yet practically perfect. On the other hand the man who is excessively anxious that he goes to the extreme in all his work to secure sterile results, *has no better success than the man who is thoroughly clean, and who uses no antiseptics of any kind.*

If we, who have to do the most of our work in kitchens, bedrooms and house to house operating can get clean results as we are doing, much of the work and worry incidental to a hospital case is needless. Abdominal operations can be done with thirty minutes' preparation as successfully as when it took thirty-six to forty-eight hours, so far as the site of operation is concerned.

In my work, the patient having been shaved by an assistant, the abdomen is macerated with green soap friction for ten to fifteen minutes. While macerating the abdomen my own hands are receiving the benefit of the soap application. The surface of the abdomen is then flushed with sterile water, and a little alcohol or ether is used to dissolve out any remaining particles of soap. Alcohol is poured over my hands

for the same reason and to do away with the slippery feeling, but not with any antiseptic expectancy. Using no gloves my hands are washed frequently in a bowl of sterile water and each time carefully dried before re-entering the wound. This simple technique gives me clean results in clean cases, and the same plan is used in the log hut a sin the operating room of St. John's Hospital.

Soap and water are sometimes aided by the application of benzine and gasoline when factory grease is to be contended with. Recently I have used alcohol denatured with benzine for a similar purpose, but a series of results have caused me to hesitate in using this excessively. I had a number of cases of various sorts of injuries that failed to heal. There was no suppuration and no evidences of inflammation. The wound simply did not close primarily. In all these cases I had moistened plain sterile gauze with the alcohol and applied it to the wound. Since discontinuing these applications my wounds are again healing by primary union.

Lawson Tait secured results that are equally satisfactory with those we get to-day, "He washed the things clean." This degree of cleanliness must go to a certain point, otherwise infection is certain. If carried too far the natural resistance of the tissues will be injured, avenues of infection will be opened up, and we are no better off than we were before we knew so much about bacteria.

It has been my misfortune to have within the last year four cases in which clean laparotomy wounds opened up and necessitated extra care and additional hospital expense and for which no cause could then be definitely located. A communication from Dr. C. A. L. Reed to the American Medical Journal dated November 30th, 1907, explains the situation. He says: "My experience has been to the effect that the heavy and hard catgut, chromicized to last twenty days, is very liable to

last forever unless it is removed. It has not, in my experience, been the cause of any infection whatever, but it has repeatedly been the cause of a chemical disintegration of the tissues resulting in the formation of a sinus and the seemingly interminable discharge of chromicized and consequently entirely sterile serum. When this exosmotic current is once established, absorption becomes obviously impossible. Even the smaller strands, Nos. 0 to 1, of twenty-day catgut are liable to cause this difficulty if they come in contact, even incidentally, with the fatty layers. As a consequence I have completely abandoned the use of twenty-day catgut of any and all sizes, and as a further consequence, I get no more yellow sap from my wounds. Nor do I have to remove knotted splinters from the field of operation some weeks after my patients are otherwise well."

In all things we have learned that radical measure are necessary yet frequently we have profited not so much from the radical measures themselves as from the things we have learned from them. The pendulum swings from one extreme to another and finally settles itself at a midpoint where it can be allowed to remain with a feeling that all is well.

Thus we see the pendulum swinging back from listerism and chemical disinfection to simple asepsis.

Curative measures, whether medical or surgical, depend on tissue resistance only. We have overdone the matter of drugging our patients to the benefit of the many cults and pathies that surround us. Our surgery, however, has reached the point where it is almost perfect so far as detail of technique is concerned. We have now to give our attention to the old essential principles of physiology and pathology, upon which a perfect surgery must rest.

*Read before the Madison County Medical Society. Listed for the State Medical Society meeting at French Lick Springs but not read because of the necessary absence of the author

ENZYMES IN THE ANIMAL BODY.

BY DR. GUIDO BELL, OF INDIANAPOLIS.

That was a great discovery when it was first found that the gastric juice contained pepsin, and that pepsin itself remaining unaltered, was the presiding genius in the transformation of nitrogenous food.

Pepsin was one of the first ferments or enzymes that we learned of. Ferments are chemical bodies that mysteriously preside over chemical changes in other bodies, changes that cannot go on without them; but which remain themselves unchanged. After pepsin has done its three hours' work upon our dinner, it is still pepsin.

Our list of ferments has been increasing ever since. We know now that there is nothing done anywhere in the body that is not done by the intermediation of ferments. There is a long series of them from the mouth down through the whole length of the intestine. They exist in the blood, and every cell in the body possesses a number of them, made by itself for its own purposes.

Digestion is a more complex process than we once thought. In the course of the digestion of a piece of white of egg, its molecules, very elaborate ones, are taken to pieces and put together again on a new pattern. Then they enter the blood in solution and go round to the cells. The various groups of cells then take them to pieces, once more and once more re-pattern them according to their various needs. Both the taking to pieces and the re-patterning are done by long series of ferments.

We can also take ourselves to pieces, still by means of ferments. When any part has become worn out, it has to be picked to pieces and thrown into the waste bin—the blood to be carried away and excreted. When a man is subjected to starvation the organs pick themselves to pieces for another purpose—to feed the all-impor-

tant heart and brain. And these two organs accept the pieces and build them up for their own work. All this by ferments.

Consider the life and structure of a muscular fibroid, which is a long single cell with the specific duty of contracting.

Part of it consists of ferments. Their duties are: To take stuff from the blood, pick it to pieces, and reshape it into cell-matter; to act upon the cell stuff so as to provoke contraction at proper times; to prepare for the dustbin the waste resulting from the work of contraction.

Part of it is the cell stuff to be used or burned in the contraction.

And the third is that which presides over the building, over the making of the ferments, and over their liberation to activity at the proper time. Anyone who thinks that he can think this presiding part to be identical with those over which it presides, may remain with this illusion. Those who will press their thought closer, will find that they cannot conceive of this presiding part as material the real purpose of the cell. Without it the activities of the cell cannot be intelligently accounted for; a concealed gap, invariable in materialistic explanation, is in the statement.

The old physiologists called these little cell beings "spirits." Harvey, the blood circulation man, denied their existence because he had not found them by dissection! Immaterial inhabitants of the living body, he complained that he could not find them by material examination of a dead one!

Present physiologists are not much better. Because with an array of test tubes and re-agents they can do some of the thing the ferments do, vital action is nothing but chemistry. But behind ferments is the cell that made them. The essential *vital* action is not what the ferments do, but the making and guidance of the ferments themselves.

As to diet, theories are changing rap-

idly. The most radical new one comes from an English physician. He thinks we eat about fifty or a hundred times more than we need. According to him, the real forces of life are etheric, and the cells are somehow absorbents of it. We need only that small amount of food that is required for the replacement of cell waste.

There is a new use for the cactus. It is already a food, a medicine, a basis for alcohol, a glue, a soap, in older days an Indian fortification, a source of toothpicks and needles, and often a nuisance. Now it appears in the role of mosquito exterminator.

The leaves are cut up in water and a thin mucilage presently results. This is diffused in a thin layer over the top of stagnant water, just as kerosene is now used. The larvae come up to the surface to get air and fill themselves with cactus gum. Thus they get an immediate chance to incarnate somewhere else; let us hope in a more benignant family of insects. The film lasts for a year.

RETRO-PERITONEAL EXPOSURE AND REMOVAL OF THE VERMIFORM APPENDIX.

BY JOSEPH RILUS EASTMAN, M. D., INDIANAPOLIS, INDIANA, CLINICAL PROFESSOR OF SURGERY IN THE UNIVERSITY SCHOOL OF MEDICINE.

In cases of appendicitis seen after abscess has formed it is plainly the duty of the surgeon to provide an exit for the pus which will allow of the least possible soiling of the peritoneum and the least possible chance of extension of the infection. It is well understood that in a certain large percentage of cases the pool of pus will be found lying directly against the antero-lateral parietal peritoneum, in which case transperitoneal drainage of the abscess is simple and safe.

It not infrequently happens, however, that although the general symptoms of abscess are all present, the

local signs of abscess forming against the anterior abdominal parietes; like circumscribed protrusion of the abdomen with fluctuation and the dull percussion-note are absent. In such a case, such definite signs as sudden decline of temperature, chill and the characteristic blood findings point directly to pus. The focus, however, often lies deeply, perhaps behind the caecum and cannot be invaded through the peritoneal cavity without risk. The foolhardiness of breaking up adhesions in an intraperitoneal search for such a pocket is clear.

Fifteen years ago the writer's father, the late Dr. Joseph Eastman, called attention to the wisdom of draining appendiceal abscesses situated behind the caecum, or at the outer side of the caecum by puncturing the peritoneum, when it is possible, directly over the abscess instead of making the opening through the peritoneum, as one may be tempted to do, at, or near, McBurney's point. He used a homely, but very easily understood, figure of speech in describing the avenue of attack in such cases. Observing that "it was his custom after making a superficial muscle splitting incision, very near to the anterior superior spinous process of the ilium and extending down to, but not through the peritoneum, to slip the gloved hand around, so to speak, between the weather boarding and the plaster, crawling in under the kitchen and finally under the cooking stove." The plaster being represented, in fancy, by the peritoneum, the kitchen by the caecum and the cook stove by the appendix—the puncture being made with the gloved finger, so to speak, through the kitchen floor, under the cook-stove.

It is remarkable how many cases of abscess following appendicitis may be dealt with safely in this way. Often it is not only quite safe, but technically easy to remove the appendix itself in this manner whether there be present much or little pus.

It occasionally happens that the abscess is quite retroperitoneal. Retroperitoneal appendiceal abscess usually develops when the appendix is situated behind the peritoneum, but may occur when the intraperitoneal organ is adherent to the parietes.

Anatomic factors are influential in determining the course and extent of the phenomena of pathology. The arrangement of the renal and hepatic fascia and ligaments favors the upward extension of the retroperitoneal iliac abscess. The abscess is also likely to travel down along the psoas muscle, and between the rectum and pelvic peritoneum.

The abscess may be thin-walled and present distinct fluctuation, or it may consist of a small necrotic focus in the center of a dense mass of inflammatory products, resembling a new-growth, which may remain for months and may even become calcified. (Kelly & Noble.)

The site of origin of the appendix, that is its site of attachment to the caecum has, of course, considerable influence in determining the location of abscess. Often the point of origin is retrocecal. The appendix may, as is well known, be an entirely extra-peritoneal organ, this depending upon whether the level of the peritoneal reflexion is above or below the appendix. If it is above, the appendix usually occupies a peritoneal pocket, a condition generally favorable for the prompt isolation of an abscess by means of adhesion, and if the peritoneal reflexion is below, the result is an extra-peritoneal appendix, a perforation of which would drain into the subperitoneal tissue of the iliac fossa, whence it might spread in several directions. (Kelly.)

It will be worth while to note the relative frequency of retrocecal and para-cecal appendiceal abscesses. It will also be interesting to observe how many of these may be drained extra-peritoneally by approaching them as suggested above, bluntly separating the

over-lying tissues from the peritoneum without perforating the latter until the way is clear to the retro-cecal accumulation. More than once the writer has seen the appendix float out through an abscess thus drained, the general peritoneal cavity not having been opened.

If possible the appendix should be removed through the parietal peritoneum where it is adherent and the pus likewise. In cases of doubt it is always wise to work around externally to the peritoneum until the adhered appendix or pus is found. One should be cautious about plunging through at McBurney's point—keeping to the outer side—lateral to McBurney's point until sure that the pus lake, or the unruptured appendix is under this landmark.

The Joseph Eastman Hospital,
331 N. Delaware St.

The Way of the World.

(Published by Request.)

Laugh, and the world laughs with you,
Weep, and you weep alone;
For this brave old earth must borrow its
mirth—
It has troubles enough of its own.

Sing, and the hills will answer;
Sigh, it is lost on the air!
The echoes bound to a joyful sound,
But shrink from voicing care.

Rejoice, and men will seek you;
Grieve, and they turn and go;
They want full measure of all your pleasure,
But they do not want your woe.

Be glad, and your friends are many;
Be sad, and you lose them all;
There are none to decline your nectar'd
wine,
But alone you must drink life's gall.

Feast, and your halls are crowded;
Fast, and the world goes by;
Succeed and give and it helps you live,
But no man can help you die.

There is room in the halls of pleasure
For a long and a lordly train;
But one by one we must all file on
Through the narrow aisles of pain.

—Ella Wheeler Wilcox.

INDIANA MEDICAL JOURNAL.

ALEMBERT W. BRAYTON, M. D., Editor.
THEODORE POTTER, M. D., Associate Editor.
ALFRED HENRY, M. D., Gen'l Mgr. and Treas.

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Short practical articles, reports of society meetings, and medical news solicited.

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All letters and communications relating to the scientific and literary departments of the Journal should be addressed to the editor, and all books for review, should be addressed to the manager.

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DECEMBER 1908.

Indiana Tuberculosis Clinic at the Indiana University School of Medicine—Medical Inspection of Public Schools.

The Indianapolis City Dispensary Clinic for tuberculosis, established in the fall of 1907, was removed on November 13th of the present year to the Indiana Medical College building, corner of West Market and Senate avenue. A special room was equipped by the City Board of Health for diagnosis and treatment. The clinic is in charge of Dr. W. T. S. Dodds, with the aid of assistant physicians appointed by the medical school. Drs. F. L. Truitt and H. R. McKinstry are now aiding in the work. Mrs. Margaret Vore is the visiting nurse. Mrs. Vore attends the clinics which are held daily at the college except Sunday and also makes visits to the homes of the patients to advise as to disinfection, food, general prophylaxis,

etc. There are 65 patients now under observation.

This Dispensary for Tuberculosis has been a favorite department with Mayor Bookwalter, who has proved the most efficient aid to the City Health Board in building up the city hospital and dispensary. The superintendent of the dispensary, Dr. E. A. Kiser, and the Health Board—Drs. E. Clark, F. Morrison, M. Spencer and T. B. Noble—have taken an active interest in this work.

More and more is State medicine asserting itself in Indianapolis. The Secretary of the City Board of Health, Dr. Eugene Buehler, has, with the aid of the Mayor and Health Board, finally established the principle that the city should look after the health of the school children. Family physicians are not interfered with. Sick and infected children and adults are advised that they need the attention of their regular physicians.

Already good results are secured. Mouth breathers, myopics, anaemics and those with parasitic and exanthematous diseases are gladly cared for when the parents are told the conditions. The whole movement is commendable. At last the school city and the civic city are working in unison, thanks to the combined interest of the Mayor, the Health Board, the City Hospital, City Dispensary and the medical profession. Such a course costs money but saves early funerals and heartbreaks. The Health Board is constantly tightening its grip. Negligent doctors are aroused; parents are informed; the newspapers are helpful. It is the duty of the city to look after the health of the school children. All the schools are inspected daily at the expense of the city, and this step once taken will never be rescinded.

An epidemic of diphtheria of over 60 cases, with 12 death, was the critical and determining incident. Among the inspectors are Drs. Amelia Keller, John Cunningham, J. D. Mac-

Donald, H. S. Thurston, L. A. E. Storch, Henry Lohrman, E. B. Mumford and others of like ability and character. Dr. Mumford is giving his entire time to the inspection of contagious diseases under the direction of the Health Board Secretary, following up the cases sent home by the school inspectors, taking cultures and advising families as to their welfare. This establishes a very important medical officer in a new role.

There have been several deaths from the delayed use of antitoxin. One case is reported in which a minimum dose was used by a physician who gave a death return of edema of the glottis. The house was quarantined, and the death was reported in the "unqualified list" of the press reports.

Smallpox is now absent from the city. There were nearly 300 cases in the last year, many undiagnosed or called chicken pox. They were often sitting in the schools with the scabs of smallpox on their bodies. Vaccination is not enforced by the schools, or insisted upon by the physicians. Only two deaths occurred—a child born with the disease and an adult with a vicious type of smallpox, from Illinois. The quarantine was efficient and the disease cost the city about thirty dollars for each patient. Every case was in an unvaccinated person. Most were children born since the great smallpox epidemic of 1902, with its universal vaccination, or it occurred in people who have recently moved into the city—the majority from Kentucky and Tennessee, or southern Indiana. Should a bad type of smallpox occur in Indianapolis with 8 to 10 per cent. of deaths, the whole population would resort to vaccination, for the people are intelligent and are not opposed to vaccination. However, during the present epoch of school inspection vaccination records should be made. Probably Chicago is the best vaccinated city in the West. Thanks to Dr. Heman Spalding, who has had a free

hand under Health Secretaries Reynolds and Evans.

The late Dr. Shrady, editor of the Record, once spoke of City Health Boards as "Benignant Autocracies." And indeed their power is mighty when supported by enlightened public sentiment and led by health officers who are something more than unctuous, abbatial, doctorial dignities—the serene and reposeful images of fatted peace.

The health department of Indianapolis has a vigorous board and capable officers. Dr. Buehler, the Secretary, has accomplished much for the city and is a progressive man. Dr. Kiser has conducted the City Dispensary creditably. Dr. Freeman has made good as superintendent of the City Hospital. All of these men should be retained, as their work cuts them out from practice in the best years of their lives and their experience is a constantly increasing asset.

The Board of Health is now non-partisan. The Mayor and Council are working together for a Contagious Diseases Hospital to cost \$50,000. The city is up to the limit of bond-making, but it is not believed that the \$600,000 bond issue for a new city hall will interfere with the new hospital. Indeed the health department has progressed with great strides. It has the sympathy and support of the people, and there can be no backward steps. The profession of medicine should lend its aid by upbuilding public sentiment and further instructing the people.

Dr. John G. Wishard's Book on Persia.

"Twenty Years in Persia" is the title of an interesting volume by Dr. John G. Wishard, director of the American Presbyterian Hospital at Teheran. Dr. Wishard is well known in Indiana—which he still calls home—and his clear, straightforward narrative of personal experiences in the land of which he writes will have a double interest to Hoosier readers on this account. The author has enjoyed

exceptional advantages in the way of gaining information for his work, as his position at the head of the hospital has put him in very close touch with the highest authorities in Persia as well as with the people. Of the nation as it is to-day, the writer says:

For the past ten years and more the country, while advancing intellectually, has been going backward in material affairs. The rich are finding it harder to meet their obligations and the peasants in many localities are banding together to resist the tax-gatherer. It seems strange to us, who have known Persia under the old regime, to hear the merchant, artisan and sometimes the laboring mechanic, discussing themes for the betterment of the people. Many of these schemes, of course, are wild and childish, but they, nevertheless, indicate that a new area of thought has dawned upon the people and that they are living in a period between the dawn and the full daylight in their political history.

The crop of newspapers which has recently sprung up in the capital is suggestive of the transformation being wrought in the land. "The Assembly," "The Civilization," "Progress," "Knowledge," are some of these. Another has the striking title of "Gabriel's Trumpet," and under the title the picture of an angel flying over a thickly populated cemetery, from which the dead are coming forth to life. Attached to the trumpet was a scroll with the motto: "Liberty, equality and fraternity." The government has now stopped the publication of this journal. A year before there was not a single political paper published, although there were several devoted to science, education and general news. The whole of the discussions in the National Assembly may be printed, but owing to their length and verbosity no one has yet done so. * * * In the Teheran papers may be seen daily articles discussing old laws to be revised or new ones to be enacted, negotiations for concessions, treaties, loans, all financial measures, including even the royal expenditures, the levying of taxes, the construction of railways, wagon roads and other needed internal improvements.

I think any one who will read the preceding chapters touching upon the social life of the people, will see that while just laws are greatly needed, they alone can not bring about the desired results. * * * With such a people the volume of business must be small until economic reforms are instituted. The struggle must be met by the enactment of just laws, the inauguration of better business methods and the establishment of schools where the value of honesty and truth are taught.

This book should have a wide sale among physicians, because its author is a physician; among missionary workers and supporters, because its author has the true missionary spirit, without any tinge of fanaticism; among travelers and historians, because its author has the experience and instinct of a traveler and historian; among general readers because it presents a series of good stories well told.

Not over 100 Europeans have visited Teheran; much fewer Americans. Every phase of this people is presented by Dr. Wishard, including their art products, many of which were exhibited at the fall opening of the Indianapolis Art Academy. The book is not expensive; it should be in many homes and in all public and church libraries.

Among the interesting chapters in the book are: "Among the Bandits and Brigands of Kurdistan;" "American Missions and Social Reforms;" "Assassination of Nasr-ed-Din Shah;" "Mohammed Ali Mirza Shah and Political Reforms in Persia." The book is well illustrated by photographic reproductions and also contains a glossary and an excellent map. (New York: Fleming H. Revell Company.) Price, \$1.50. For sale by all Indianapolis book dealers.

The Education of Youth.

The monumental work of G. Stanley Hall on "Adolescence," has been put in more accessible form by an abridged edition, called "Youth; Its Education, Regimen and Hygiene." Dr. Hall has been the most indefatigable accumulator of facts that bear upon the development of human life at the adolescent stage. He has used to advantage the researches of his students at Clark University.

Dr. Hall realizes that nature, after all, is the great educator, not to be checked and thwarted, but co-operated with; he agrees with the Rousseau doctrine that the early years should be left largely to the primal, heredi-

tary impulsions, and would allow the "fundamental traits of savagery their fling until twelve, if the proper environment is provided." "The inborn, savage instincts can and should be allowed some scope." The child must live out each stage of life to its fullest. The repression of these savage instincts works disaster later in life.

Dr. Hall emphasizes the valuable features of industrial education, manual training, gymnastics, play, sports and games. In play he finds a school of ethics. It gives not only strength, but courage and confidence; tends to simplify life and habits; gives energy, decision and promptness to the will; brings consolation and peace of mind on evil days; it is a resource in trouble, and brings out our individuality.

The parent of the "bad" boy who can not understand why such an ugly duckling got into his brood of virtuous barnyard fowls, will take heart in reading this book, while the parent of the always-good boy may be incited to teaching this unnatural specimen how to be naughty. How shocking to have Dr. Hall tell us that the boy should go through many of the "forms of what teachers and parents commonly call 'badness.' He should have fought, whipped and been whipped, used language offensive to the prude, been in some scrapes, and been exposed to, and already recovering from, as many forms of ethical mumps and measles as, by having in mild form now, he can be rendered immune to later when they become far more dangerous. He is not depraved, but only in a half-animal stage. Something is amiss with the lad of ten who is very good, studious, industrious, thoughtful, altruistic, quiet, polite, obedient, gentlemanly, orderly, always in good toilet, who turns away from stories that reek with gore, refuses all low associates, speaks standard English, or is as piously and deeply in love with religious services as the typical maiden teacher wishes. Such a boy is either under-vitalized and anaemic and precocious by nature,

a repressed, overtrained maniken, a mypocrite or else a genius of some kind." But these characteristics should be changed with the teens. Then the ethical life begins.

In this work Dr. Hall acknowledges the valuable aid of Superintendent C. N. Kendall, of Indianapolis. (New York: D Appleton & Co. \$1.50.)

(The editor of the Journal has read Dr. Hall's book and has loaned it to the heads of various families, who wished something sound on the education of children. The chapters on co-education, upon religious training, and especially the education of girls, are alone worth the book. If a copy could be put in the hands of every teacher and parent in the State it would be a blessing to youth. Mr. Kendall is to be commended for inciting Dr. Hall to prepare this book.—Editor.)

Prof. William K. Brooks of John Hopkins University.

The Baltimore papers gave large space to the life and scientific achievements of Prof. William K. Brooks, of Johns Hopkins University, who died a few days ago. It was he who put oyster culture on a scientific basis and so added immeasurably to the wealth of his adopted State. Dr. Brooks was a brother of Mr. Charles E. Brooks, secretary of the Indianapolis Malleable Iron Works, and well known in church and society circles of Indianapolis. The Baltimore Sun had the following appreciative editorial:

The State of Maryland owes a debt of gratitude to many of the learned, public-spirited and zealous men who have been brought to Baltimore by the Johns Hopkins University. These men have explored her territory, discovered hidden wealth and pursued investigations which have benefited the people. But to none of them does she owe more than to Dr. William K. Brooks, who died in late October of the present year. The president of the university has declared that he was a lovable man, who had won completely the affection of all who profited by his instruction and of all who were brought into social relations with him. He was a modest gentleman, a dili-

gent, but retiring student, eminent among scientific men for his researches and discoveries in the department of science to which he devoted himself. He was the author of many excellent works, but his practical work in the Chesapeake zoological laboratory was that which caused him to be best known in this State. At the request of Major Ferguson, then fish commissioner of Maryland, Professor Brooks, in June, 1879, opened the Seaside laboratory of the Johns Hopkins University at Crisfield to trace the development of the young oyster. During the investigation that summer he made discoveries about the propagation of oysters and the history of the young oyster which, besides their scientific interest, have been made successful experiments in the artificial fertilization of oyster spat and discovered that the young oyster swims at large in the open ocean. He illustrated the prodigious fecundity of the oyster by showing that a single female contains over 18,000,000 eggs, and some very large ones as many as 60,000,000.

In 1882 the General Assembly authorized the Governor to appoint three citizens to examine the condition of the oyster beds and to make a report. Governor Hamilton appointed as this commission Prof. W. K. Brooks, Capt. James I. Waddell and Col. William Henry Legg. Dr. Brooks and Captain Waddell united in a report, which was prepared by Dr. Brooks and which is now the text-book and authority upon the Chesapeake oyster and the oyster industry. In writing that report Dr. Brooks performed a service to his adopted State, the value of which is beyond measure. For a number of years this great and valuable work lay unnoticed in the pigeon-holes of the Legislature. The politicians were afraid of it, but it was finally brought forth and is now the reference book in all discussions of the revival of the oyster industry and of oyster farming. In this report Dr. Brooks startled the people with the declaration that "the oyster bottoms of our State, are of greater value than the dry land, and they will some day support a great and prosperous population."

It was asserted by competent authority that this report was "one of the most thorough and masterly that was ever received by Legislature or Parliament and one of the most important subjects that could come before a Maryland Legislature. It showed the results of careful scientific study, practical sense and fearless honesty." When the time comes for the verification of Dr. Brooks's declaration that the Chesapeake can produce 500,000,-

000 bushels of oysters annually and give employment to 500,000 persons there, the people, not only of Maryland but of the country at large, will appreciate the magnitude of their debt to Prof. Brooks, scholar, gentlemen and analogist.

The editor of this Journal has known Professor Brooks since July 1877, when with President Jordan, of Stanford University, Professor Barton W. Everman now the head of the U. S. Fish Commission, and Professor Charles Gilbert, of Indianapolis, now head of the Department of Biology at Stanford, he met Professor Brooks and his bride enjoying their honeymoon at the Rip Raps, an old stone fortification opposite Fortress Monroe. Professor Brooks had conducted a summer school of Biology at the Rip Raps and President Jordan and the writer had also conducted a tramp school for twenty students for six weeks mainly of Butler College students over 300 miles of the southern Alleghenies, paying due attention to botany and geology, but mainly to the fishes of the mountain region, discovering some twenty species new to science. Every stream from Louisville to Atlanta and back to Nashville was seined and the fishes examined. The two schools were disbanded, only the leaders and teachers of the Butler school were left, and were on their way to spend the month of August studying the fishes of the Smithsonian collections in Washington. Among the students of these mountain tramp schools the two summers they were conducted were Messrs. Charles Moore and Charles Merrill, of Indianapolis, and also Dr. John Oliver and Mr. Horace Smith. Ladies accompanied them, two even walking from the top of Mount Mitchell, the highest peak of the Alleghenies, 6,711 feet in height, to Asheville, S. C., a distance of 40 miles and a descent of nearly a mile.

Professor Brooks and his assistant, Dr. Rice, were engaged in studying the

embryology of the smallest known vertebrate animal—the little headless, finless and heartless, toothpick-shaped fish known as *Amphioxus lanceolatus*, the lowest in the scale of vertebrated animals. Its chief possessions are a neuron axis, and an abdominal cavity separated by a notochord and enveloped in a smooth skin. But on that lone sea-girt isle that day met two of the greatest naturalists of the United States. Professor Brooks was for over thirty years a great leader in biology, and added countless wealth to the world's food supply by his studies in the embryology of the oyster. President Jordan is at the head of the wealthiest university foundation in the United States; he is one if the greatest of educators, and in his special field of ichthyology is in the lead. There are some ten or twelve thousand known species of fishes in the world and of these President Jordan has given names to over 1,000.

Neither of these men cared for riches or fame; they simply followed, like Darwin and Agassiz, whose spirit and enthusiasm they emulated, the simple and patient ways of student life. And verily they have met their reward in the larger knowledge and betterment of the world.

Honor Roll of Physicians.

The State Board of Medical Registration and Examination, December 2, issued an honor roll of twelve physicians who passed the Medical Board examination in October with a standing of better than 900 points out of a possible 1,000. The twelve chosen were out of a class of fifty-nine, only fifty-three of whom were successful in obtaining licenses. The men on the roll in order are Henry Irving Berger, Indianapolis, with a standing of 946; John W. Green, Albion, 920; Charles T. King, Indianapolis, 919; Frank W. Kern, Heltonville, 911; Fred Bierly Jr., Lafayette, 907; Albert E. Freeman, Amboy, 907; William L. Royster, Evansville, 905; Ivan E. Carlyle, New

Philadelphia, 904; Ernest L. Schaible, Gary, 904; Charles F. Fletcher, Sunman, 903; Lenore Leeds, Richmond, 903; Claude Lomax, Bristof, 903.

Professor Herrick's "Together."

"The Chicago Public Library has placed Joseph Medill Patterson's *"Little Brother of the Rich,"* and Prof. Robert Herrick's *"Together"* on the forbidden list as books unfit for promiscuous circulation. This precaution was hardly necessary. The deadly dullness of both these books is enough to offset their improprieties. Few readers will wade through them."

Professor Herrick is a member of the faculty of Chicago University. This book deals with marriage a la mode. Also with politics and the race for wealth. To those who like this kind of a book it is just the kind of a book they would like. The note above is from the *Indianapolis Star*. The editor read Dr. Cole's copy and has loaned it in succession to Drs. McDonald, Sluss, Ferguson, Reyer and O. G. Pfaff. The opinions are various but all enjoyed the book. It is one the *"Slick Six Best Sellers,"* and that is what it is made for. It is not literature by any means. It is a "purpose novel," and is not engaged in "carrying tired people to the islands of the blest. Only America could have produced it. It deals with the world, the flesh and the devil as they present themselves under a high tariff and the race for wealth, but is tempered with the ancient moralities and the still small voice of an unsmothered conscience. The scene is laid in Indianapolis primarily, but it shifts to fields of better stealings and where there is less of sweetness and light. The "oldest profession in the world," but legalized by marriage, is constantly to the front.

But the still older passion of love, and the sublime sense of the eternal womanly breaks often through the clouds and illuminates the story. Unless you are dead sure of yourself and your family peace, you had best read it, before you give it to your wife and

daughters to read. It might prove a boomerang.

Some ten or fifteen years ago Mr. Kipling noticed a statement that "the three-volume novel is extinct." The reference of course was to the old standard English novels, including Jones and Fielding, which were published in three thin volumes and circulated through the town and country libraries. Later came Scott, Trollope, Dickens and Thackeray, refined, varied and helpful, also the Brontes, George Eliot, Mrs. Humphrey Ward and others more or less didactic, instructive and philosophic.

Then came the Hall Caine type, dealing with religious and social topics, and it was this group particularly that aroused the ire of Kipling and led to the writing of the well-known poem, "The Three-Decker," which may be read in the "Seven Seas." The "Seven Seas" is itself a volume of "purpose poems," dealing with national and social topics, and stamping the author as the real, though uncrowned, poet laureate of the British Empire and the most virile of present English poets. The "Three-Decker" represents the old type of recreation novels as opposed to the Hall Caine and Robert Herrick type, "asking social questions, and pumping hidden shame."

Indeed it draws the distinction so plainly that it is worth while to reproduce the entire poem for the benefit, and pleasure, too, of our physician readers. For now the physicians, and notably the preachers, have taken upon themselves new and unnecessary burdens. Many of them are not content with the practice and study of what is now the foremost branch of human science—medicine as the beneficial cap sheaf of biology. To these they would add philosophy, sociology and religion and even make the ministry co-partner in the healing of disease.

The sacred field of education is also occupied by the doctors, and notoriously, and the writer believes irration-

ally and even scandalously, the regulation of marriage and the sexual functions, by lectures to boys and girls just out of knee pants and short dresses. Politics, sociology, education and religion are only incidental to the profession of medicine; they should not be its end and aim.

Kipling puts in a plea for the, old novel of joy and happiness—our being's end and aim. And joy and happiness should be the aim and teaching of the physician; joy in the life of nature; joy in health, in love and in youth; joy in early wedded life and the rearing of children; joy in labor, in eating and drinking and abundant loving; joy in the things of the spirit and of the body, without over-introspection and undue curiosity. But enough; here is the word of the old "Three-Decker."

THE THREE-DECKER.

"The three-volume novel is extinct."

Full thirty foot she towered from waterline
to rail.
It cost a watch to steer her, and a week to
shorten sail;
But, spite all modern notions, I found her
first and best—
The only certain packet for the Islands of
the Blest.

Fair held our breeze behind us—'twas warm
with lovers' prayers:
We'd stolen wills for ballast and a crew of
missing heirs;
They shipped as Able Bastards till the
Wicked Nurse confessed,
And they worked the old three-decker to
the Islands of the Blest.

Carambas and serapes we waved to every
wind,
We smoked good Corpo Bacco when our
sweethearts proved unkind;
With maids of matchless beauty and parent-
age unguessed
We also took our manners to the Islands of
the Blest.

We asked no social questions—we pumped
no hidden shame—
We never talked obstetrics when the little
stranger came:
We left the Lord in Heaven, we left the
fiends in Hell.
We weren't exactly Yussufs, but—Zuleika
didn't tell!

No moral doubt assailed us, so when the
port we neared.

The villain got his flogging at the gangway,
and we cheered.

'Twas fiddles in the foc-sle—'twas garlands
on the mast,

For every one got married, and I went
ashore at last.

I left 'em all in couples akissing on the
decks.

I left the lovers loving and the parents sign-
ing checks.

In endless English comfort by county-folk
caressed,

I left the old three-decker at the Islands of
the Blest!

That route is barred to steamers: you'll
never lift again

Our purple-painted headlands or the lordly
keeps of Spain.

They're just beyond the skyline, howe'er so
far you cruise

In a ram-you-damn-you liner with a brace
of bucking screws.

Swing round your aching search-light—
'twill show no haven's peace!

Ay, blow your shrieking sirens to the deaf,
gray-bearded seas!

Boom out the dripping oil-bags to skin the
deep's unrest—

But you aren't a knot the nearer to the
Islands of the Blest.

And when you're threshing, crippled, with
broken bridge and rail,

On a drogue of dead convictions to hold
you head to gale,

Calm as the Flying Dutchman, from truck
to taff-rail dressed,

You'll see the old three-decker for the
Islands of the Blest.

You'll see her tiering canvas in sheeted sil-
ver spread;

You'll hear the long-drawn thunder 'neath
her leaping figure-head;

While far, so far above you, her tall poop-
lanterns shine

Unvexed by wind or weather like the
candles round a shrine.

Hull down—hull down and under—she
dwindles to a speck,

With noise of pleasant music and dancing
on her deck.

All's well—all's well aboard her—she's
dropped you far behind,

With a scent of old-world roses through the
fog that ties you blind.

Her crew are babes or madmen? Her port
is all to make?

You're manned by Truth and Science, and
you steam for steaming's sake?

Well, tinker up your engines—you know
your business best—

She's taking tired people to the Islands of
the Blest!

The Indiana University School of Medicine.

The medical school is doing well. President W. L. Bryan has been present at every meeting of the faculty. There is little doubt but that the legislature will accept the school and make a substantial appropriation for its support during the coming session. To this end the medical profession in Indiana should use its influence. The State Hospital has entered upon its third year, in the property built by the old Central College of Physicians and Surgeons. The clinics held at the City Hospital, at the Bobbs Free Dispensary in the old Indiana Medical College building, and in the Children's Hospital occupy all the time of the senior class. The library room of the college is occupied by the Indianapolis Medical Society each Tuesday evening. The present is the critical year for the new school. It is up to the general profession in the State to secure its future through the action of the coming legislative session.

Cornell President the Guest of Indiana Alumni.

President Jacob G. Schurman, of Cornell University, was the guest of the Indiana Cornell Alumni Association at a banquet at the University Club December 8. About twenty-five members of the association were present and joined in bringing back the spirit of "old Cornell" to Indianapolis for a few brief hours. Albert Metzger, president of the association, was master of ceremonies.

President Schurman, following coffee and cigars, told many events that have taken place at Cornell of interest to the men who spent four years of their life in that institution. President Schurman emphasized the need of a closer relationship between the methods of instruction in high schools and colleges.

Superintendent Kendall, of the Indianapolis public schools, was the only other guest at the banquet. Following

President Schurman's talk he gave some interesting figures relative to the work of the public schools in this city.

President Schurman addressed the Indianapolis teachers at Caleb Mills Hall the same afternoon. He was on his way to the West, visiting colleges and the alumni associations of the country. The Cornell Society in Indianapolis has over 30 members.

PERSONAL.

Dr. C. M. Gravis Dead.

MARTINSVILLE, INDIANA, November 11.—Dr. Charles M. Gravis, a well-known physician, died here yesterday. Dr. Gravis was born in Ohio, and at the breaking out of the civil war he entered the Eighty-ninth Ohio Infantry and served honorably throughout the war. He was a prisoner at Libby and Andersonville for fourteen months. After his discharge from the army he went to Indianapolis, graduated in medicine and practiced in Southport, Glens Valley and Indianapolis until twenty-five years ago, when he came to Martinsville, where he continued the practice of his profession until his death. On September 15, 1870, he was married to Sarah C. Smock, daughter of Isaac and Ann T. Smock. He is survived by his widow, his son, Dr. Fred Gravis, and his daughter, Mrs. Grace Gravis Brown, and by his sister, Mrs. Mary Gray. Justice of the Peace Smock, of Indianapolis, was a brother-in-law. Dr. Gravis was held in high esteem by a large circle of friends and acquaintances. The funeral will be held here tomorrow morning at 10 o'clock.—*Indianapolis News*.

Thomas Dover, Maker of Dover's Powder.

Thomas Dover has other titles to biographical distinction in addition to the fact that he really combined in his own person the apparently irreconcilable attributes of a successful medical practitioner and a successful fighting

buccaneer. It is as a discoverer that he is chiefly entitled to a niche in the Temple of Fame. He discovered—that is, was the first to compound and prescribe—the celebrated powder which bears his name and is obtainable as Dover's powder today in every apothecary shop where the English language is spoken; and he discovered and released from his long solitude on the Island of Juan Fernandez the original Robinson Crusoe, Alexander Selkirk.

Dr. Dover, who had studied medicine under the great Sydenham, appears to have been engaged in practice at Bristol in the latter days of the great English buccaneers; of whom Sir John Hawkins was the most famous, when, in 1708, he was induced to become a promoter of an expedition of adventure, not to say pillage, to the South seas. There were two ships in this expedition. The celebrated navigator, Dampier, went as pilot, and Dover, on account of his large pecuniary interest in the undertaking, was made third in command under Capt. Woodes Rogers, with the title of Captain Dover. He proved himself well worthy of the title before he returned to Bristol. In a successful attack on the city of Guayaquil he led the assault; and the prizes of the expedition were so numerous and so rich that his ships brought home plunder of the value of £170,000.

But the finding of Robinson Crusoe was the most interesting of his experiences, and in that event he participated directly and personally, going ashore himself in a boat to ascertain what was the source of a light on the island of Juan Fernandez which had been observed from his ship. The result was the discovery of Alexander Selkirk. He was a Scottish sailor who had been left there on account of a difference between him and the master of his vessel and had remained there in solitude four years and four months. There were upward of 500 goats on the island, and his chief subsistence was the flesh of these animals,

which he caught by running them down, after his ammunition gave out and he was unable to shoot them. For vegetable food he had turnips, which had been introduced by mariners visiting Juan Fernandez for supplies of fresh water, and also the fruit of the cabbage palm. He had clothed himself in goatskins, and procured fire by rubbing sticks of pimento wood together. For mental food he had constant recourse to the Bible and a few other books—the titles of which are not given—and “he employed himself in reading, praying and singing psalms, so that he said he was a better Christian during his solitude than he ever had been before, and than, as he was afraid, he would ever be again.” These words seem to have been prophetic, for he joined the buccaneers as a mate of one of their ships and his share of the prize money amounted to £800.—*New York Sun*.

Dr. Daniel Colt Gilman.

The death of Daniel Coit Gilman, which occurred on October 13, removes from the educational life of the United States one of the most useful and successful college educators. Dr. Gilman is best known for the work he performed in raising Johns Hopkins University of Baltimore to the pre-eminent position which it occupies.

Dr. Gilman was professor at Yale University from 1855 to 1872; then he became president of the University of California; and in 1875 he took up the presidency of Johns Hopkins, which he held for twenty-five years. Since then he has rendered many honorable and important public services, as president of the Carnegie Institute, of the National Civil Service Reform League, of the American Oriental Society, etc. He was for a number of years an active member and later president of the Baltimore school board. Dr. Gilman's published writings include books, addresses and magazine articles on educational and scientific subjects.

Mr. Roosevelt's Future.

He has only once been President by a popular vote, and the idea of his being written off from American affairs and settling down to the secluded life in which some of his predecessors have faded from the public gaze is one of those things which the mind refuses to think. The future of Mr. Roosevelt is at least as interesting as the future of Mr. Taft or Mr. Bryan or Mr. Hearst. He is perhaps the one man in the world of whom it can be said that after seven years of public office he retires with his popularity unimpaired. To have such a man in reserve is a great asset for any nation, and it is impossible to believe that he will not be a powerful force in molding the future of America.—*Westminster Gazette*.

New Surgeon-General.

WASHINGTON, D. C., November 13.—The appointment of Col. George H. Torney as surgeon-general of the army, to succeed Surgeon-General R. M. O'Reilly, was announced by the Secretary of War to-day. Colonel Torney is now in charge of the general hospital at San Francisco. The vacancy in the surgeon-generalship will occur on January 14. The Secretary of War stated that Colonel Torney's appointment was based on his splendid record as an administrative officer and as a surgeon. Colonel Torney was not a candidate for the position.

Drs. Kennedy-Nebeker.

COVINGTON, INDIANA, November 27.—The marriage of Dr. Charles M. Kennedy, of Camden, Ind., and Dr. Eva Nebeker, daughter of Mr. and Mrs. Lewis Nebeker, of this city, took place at the home of the bride's parents Wednesday night. The Rev. F. E. Daugherty, of the M. E. church, officiated. The bride invited thirty of her friends in for the evening, not giving them a hint that they were to witness a wedding ceremony, until the bride-

groom and bride appeared in the parlor. Dr. and Mrs. Kennedy are graduates of the Indiana Medical College, where they first met.

Dr. Jacob V. Baker has moved his office from Harrodsburg to Edinburg, Indiana his new home and requests that his *Journal* be sent to the new address.

Dr. Harrington Dead.

DR. CHARLES HARRINGTON, of Boston, one of the most distinguished sanitarians in America, died at Lynton, England, September 11, 1908, aged 52 years. His death took place while he was on vacation, was sudden, and presumably caused by heart disease. He was an ornament to his profession and his death is a distinct loss to scientific, especially sanitary medicine, the world over.

Dr. Helene Knabe Resigns from State Laboratory.

The resignation of Dr. Helene Knabe as head of the bacteriological laboratory has been accepted by the State Board of Health, to take effect on Dec. 1. The lack of funds, owing to the Legislature's appropriation, to pay Dr. Knabe a salary which she considered adequate, is the cause of the resignation.

Announcement has been made of the appointment of Dr. J. P. Simonds of St. Louis to succeed Dr. Knabe.

"Dr. Knabe can make more money by practicing medicine than she can in her present position and I do not blame her for resigning," said Dr. Hurty. "Her work as head of the laboratory was entirely satisfactory and she could have remained in the position as long as she desired, as far as the board is concerned. The Legislature does not appropriate money enough for us to pay an adequate salary."

Dr. Knabe will remain in Indianapolis. Her paper Nov. 24th before the Indianapolis Medical Society, Nov. 23,

based upon her own observations in typhoid fever causation and diagnosis will be printed in an early issue of the *Journal*. It is an essential and practical addition to the literature of this disease as it occurs in our State. Dr. Knobe has opened an office in the Board of Trade Building with laboratory for bacteriology and pathology and pasteur treatment of hydrophobia.

Dr. Peyton, County Health Officer for Clark County.

Dr. D. C. Peyton, the well known surgeon of Jeffersonville, and ex-president of the Indiana Medical Society, has consented to act as County Health Officer for Clark County. Dr. Varble, his predecessor, has resigned, for he has concluded to locate at Gary, Ind. The state is to be congratulated that such men as Dr. Peyton will accept such a poorly-paid and unthanked service as county health officer. It proves what the State Board has long contended, namely, that the best class of physicians everywhere, not only favor public health work, but are willing to make sacrifices for the cause.—Health Board Bulletin.

Dr. Lydston on the Psychology of Graft.

Dr. S. Frank Lydston, of Chicago, author, teacher and surgeon, read a paper on the "Psychology of Graft" before the French Lick meeting of the Ohio Valley Association, Nov. 11th.

Dr. Lydston was the guest of Dr. W. N. Wishard, at the Columbia Club, with Drs. J. W. Hurty, Bernard Erdman, H. S. Hamer and the editor of the *Journal*.

Hornaday, the Indiana Collector and Naturalist.

So many native Hoosiers have achieved distinction in different vocations that it is hard to keep track of them all. It may not be generally known that one of them has a world-wide reputation as a zoologist. This is William T. Hornaday, director of the

New York Zoological Park since 1896. Mr. Hornaday was born at Plainfield, Hendricks county, and is a relative of the well-known Washington correspondent of *The News*. He studied zoology in this country and in Europe and has prosecuted researches in the West Indies, South America, India, Ceylon, the Malay peninsula, Borneo, etc. He is the author of numerous works on zoology and has received many honors from different societies and a gold medal "for eminent merit" from the Camp-Fire Club of America.

By Meredith Nicholson.

That with every succeeding year the stability of American institutions is more clearly demonstrated and proved; that the people are everywhere asserting themselves with intelligent and courageous independence, particularly in their impatience of corruption and incompetency in local affairs. These strike me as great and encouraging signs in our political life.

Again, too, it is clear that "sweetness and light" are more and more widely diffused in the American mind and heart; that justice, mercy and kindness have, as never before, their day in court; that, through an increasing number of wise and beneficent agencies, the poor, the joyless, the erring, are made to feel the hope and peace of Nazareth that came to lighten all the world.—Thanksgiving Day Star.

Things for Which Indiana Should be Thankful.

It is recorded in Holy Writ that Asa sought not the Lord but the physicians and Asa slept with his fathers. Too many people desirous of the highest individual and civic good are replying therefor upon the Indiana Legislature. It is to be, I trust, a high-minded and patriotic body, and yet I hope we will not make it the exclusive hope of reform in Indiana.

I am thankful for my belief in the soundness of heart of the great body of the people of Indiana; that regard-

less of creed or politics, in spite of failure and mistake, they seek the better way. I am thankful that there are in Indiana as many descendants of that disciple who leaned upon the Master's breast as there are of that disciple who smote off the high priest's ear.

From the Indianapolis Star of Thanksgiving, Nov. 29, 1908.

The sentiment of the above is individual and admirable—and inasmuch as the fighting character of the disciple is indicated it makes little difference at this day and date whether one of them struck a servant of the high priest and smote off his ear, or smote off the ear of the high priest himself, although each of the four Gospels state that it was the servant who was mutilated. Probably this is an error of the "mechanical department" of the Star.

Drs. Gorgas and Taylor, Guardians of the Coasts.

In the opinion of *The Clinic*, the two most important strategic points in sanitary affairs in the United States today are occupied by Dr. W. E. Gorgas at Panam and Dr. E. B. Taylor at San Francisco. These two points are the "Peach Orchards" of the Gettysburg of modern civilization. At Panama, modern medicine is put to its uttermost to demonstrate that malaria, yellow fever and other tropical diseases can be held in check by sanitation. We have had occasions before to commend the magnificent work done by Drs. Gorgas and Wood, where they accomplished the modern miracle of stamping out yellow fever where it had been endemic from time immemorial. The value of their work has since been attested by the reappearance of yellow fever as soon as the Cuban authorities relaxed the vigilance of the Gorgas quarantine. Dr. E. B. Taylor, formerly a professor in a San Francisco medical college, has been re-elected mayor of San Francisco by the reform party. The physician in politics has, in the case of Dr. Taylor,

proved his right to be there, and, if the battle for civic righteousness in San Francisco—the storm center of municipal graft—is won, it will be largely through the ability and bravery of Dr. Taylor.—*The Chicago Clinic*.

Dr. James A. Egan, secretary of the Illinois State Board of Health, has just issued what he designates the "sixth, revised edition" of the Board's circular on "The Causes and Prevention of Consumption." This is, in reality, a misnomer, for the new circular is an original work containing so much absolutely new work and with the older sections so rewritten and revised that it hardly appears to be associated with the previous editions in any way. The circular now stands without an equal among the publications intended for the education of the people concerning tuberculosis—the best work of its kind ever issued by any public health organization.—*The Chicago Clinic*.

Dr. Kennedy Elected Coroner of Carroll County.

Dr. Charles Monroe Kennedy, of Camden, Ind., class of 1905 Indiana Medical College, was elected coroner by the Democrats of Carroll county by a plurality of 132 out of over 5,000 votes cast. Dr. Edward D. Wagoner, Indiana Medical College, '03, was close behind Dr. Kennedy, on the Republican ticket. The winner got through with one vote to the good.

SOCIETY MEETINGS.

Ohio Valley Medical Society.

WEST BADEN, INDIANA, November 11.—The Ohio Valley Medical Association held its first session this morning at 9:30 o'clock in the Casino building at the French Lick Springs hotel.

Dr. G. D. Kahlo, of French Lick, formerly of Indianapolis, acted as chairman. He called the convention to order and introduced the president, Dr. J. L. Wiggins. Thomas Taggart

welcomed the doctors. The organization covers Indiana, Ohio, Illinois and Kentucky. About 150 physicians were present for the afternoon session. Secretary Dr. L. W. Floyd made a report, after which the convention appointed standing committees for the ensuing year.

At the session this morning Dr. N. A. James, of Meinrad, read a paper on "The Century's Progress in Therapeutics," which was discussed by Dr. G. D. Kahlo. Dr. F. L. Davis, of Evansville, read a paper which was discussed by Dr. C. B. Harpole; Dr. J. W. Hamilton read an interesting paper, and Dr. H. C. Mitchell, of Carbondale, Ill., read a paper which was discussed by Dr. H. O. Pantzer, of Indianapolis. "The New Treatment of Narrow Pelvis," by Dr. G. Zinke, of Cincinnati, was discussed by Dr. George Young, of Evansville. Dr. Curren Pope, of Louisville, Ky., read a paper, and Dr. H. R. Allen, of Indianapolis, told of a new method of making noses, which was discussed by Dr. A. M. Vance, of Louisville.

AFTERNOON SESSION.

The afternoon session was called to order at 1:30 o'clock. Dr. C. Fisch, of St. Louis, Mo., read a paper on "Dealing with the Ethnology of Certain Diseases." Dr. W. Thrasher read a paper on "Disease of the Nose." It was discussed by Dr. J. F. Barnhill, of Indianapolis. Other physicians on the program were: Dr. L. H. Iddingsfeld, Cincinnati, on "The Wasserman Diagnostic Serum Test for Disease;" Dr. J. H. Kellogg, Battle Creek, Mich., on "Efficient Substitute for Alcohol;" Dr. D. N. Eisendrath, Chicago, on "The Diagnosis and Treatment of Renal Calculi;" Dr. B. M. Rickets, Cincinnati, on "Surgery of Hairlip and Cleft Palate;" Dr. J. R. Eastman, Indianapolis, on "Technic of Hairlip and Cleft Palate Operations;" Dr. T. V. Keene, Indianapolis, on "The Mad Dog; Its Ravages and Control;" Dr. E. S. Allen, Louisville, on "Experiments with the Copperhead Snake."

Ninth District Meeting at Crawfordsville.

More than a half hundred physicians, representing a score or more towns in the 9th district, attended the annual meeting of the Ninth councilor district of the Indiana State Medical Association held in Crawfordsville November 11th, at the Elks' Home. Dr. J. N. Hurty, who was the guest of honor, gave an address on "The Medical Inspection of School Children." Judge Jere West, of the Montgomery Circuit Court, made the address of welcome, to which Dr. Charles Chittick, of Frankfort, responded. The physicians attended the annual banquet served in Masonic Temple. Dr. Warren H. Ristine, of this city, was toastmaster. The following responses were made: "Fraternally Yours," Dr. J. R. Sickler, of Frankfort; "What Next?" Dr. J. N. Hurty, of Indianapolis; "Gasoline in Medicine," Dr. George Rowland, of Covington; "Antis," Dr. F. A. Tucker, of Noblesville; "Hypnotism," Dr. W. S. Walker, Lafayette; "Mental Health," Dr. Clarence H. Wilson, pastor of Center Presbyterian church, of Crawfordsville.

National Epileptic Association at Indianapolis.

The annual convention of the National Association for the Study and Care of Epileptics held its closing session Tuesday night, November 12, with a business and social meeting at the German House, where an interesting series of biograph pictures was shown representing the seizures of epileptics and the movements of persons afflicted with nervous diseases. The Marion County Medical Society met with the National Association and heard several of the papers and saw the biographs representing the movements of patients in various forms of nervous disease. They were similar to those exhibited at the Boston meeting of the A. M. A. At this closing meeting Dr. W. F. Drewry, of Petersburg, Va., was elected president for the ensuing year; W. C. Graves, Chicago, secretary of

the Illinois State Board of Charity, first vice-president; Dr. P. C. Fitzsimmons, of Wilkes-Barre, Pa., second vice-president; Dr. J. F. Munson, of Sonyea, N. Y., secretary and treasurer.

In the afternoon the association visited the Indiana Central Hospital for the Insane, where Dr. A. E. Sterne held a clinic.

Wednesday morning the members of the association and a number of other persons went to inspect the Indiana Village for Epileptics, near Newcastle.

Seventeen delegates were present from Illinois, appointed by Governor Deneen, to investigate this colony of epileptics, as a movement is on foot in Illinois for establishing a similar colony in that State. The next meeting of the association will probably be held about this date, at Chicago, though neither time nor place has yet been determined.

Sixth District Meeting at Rushville.

The fifth annual meeting of the Sixth councillor district of the Indiana Medical Association was held December 4th in the courthouse assembly-room. Dr. David W. Stevenson, of Richmond, district councillor, presided, and the day was a busy one for the physicians. The leaders of discussions were: Dr. W. H. Davis, of Wayne county; Dr. E. L. Patterson, of Franklin county; Dr. H. A. Barnes, Hancock county; Dr. John Hurty, secretary State Board of Health; Dr. T. C. Kennedy, Shelby county. Others that had a part in the discussions were: Dr. E. H. Brubaker, Henry county; Dr. E. L. Bramkamp, Wayne county; Dr. Paul Trees, Hancock county; Dr. T. G. Green, Shelby county; Dr. O. J. Gronendike, Henry county; Dr. Grant Pigman, Union county.

The big event of the day was the banquet, which was served at 6 o'clock in the evening, at the Main-street Christian church. Dr. J. C. Sexton, of Rushville, was toastmaster. The toasts were: "What the Women Say," Dr. S. N. Hamilton, of Richmond; "From

Saddlebags to Automobiles," Dr. William H. Smith, this city; "The Doctor in the Case," Dr. O. E. Holloway, of Knightstown; "The Inexperienced Witness," Dr. C. K. Bruner, of Greenfield; "Union," Dr. F. T. Dubois, of Liberty; "The Doctor in Relation to His County Medical Society," Dr. Charles Marvel, of Richmond.

Join Your Local Society and Attend.

Nowhere else can you study the styles of different doctors and learn the secrets of each one's success or non-success so fully as at medical meetings. There, each contributes to the instruction and intellectual recreation of the others. There, you can meet your neighbors on common ground, and experience and opinion can be compared by face-to-face discussion; there, rivalries, dissensions and controversies can be softened, and professional friendship be formed; there, you can measure the height and depth of your medical contemporaries and see the difference between pigmies and athletes, between giants and dwarfs; there, you can estimate the influence of many undefinable excellencies in some, and discover and learn to avoid the imperfections of others.—D. W. Cathell, M. D.

MISCELLANY.

Geologist Blatchley Talks on Indiana Mineral Waters.

State Geologist W. S. Blatchley, of Indiana, reports that there are eighty springs and eighty-six wells in the State of Indiana producing mineral waters of therapeutic value. He urges that the mineral water resources of the state be studied and developed. In an interview Mr. Blatchley recently said:

"These wells and springs are distributed among forty-two of the ninety-two counties of the state. At a number of them large hotels and bath-houses have been erected for the accommodation of guests. Those of two or three localities have already become

so noted as to attract many thousands of visitors each year from all parts of the United States. A number of other springs and wells of the state have waters which are as valuable and worthy of increased public patronage as those of these better known resorts.

"Among those little known which will repay the investment of capital in their development are (a) the Lodi well near Silverwood, Fountain County, drilled in 1865 to a depth of 1,155 feet. It has an output of 30,000 barrels of saline-sulphuretted water per day. This water is fully equal in medicinal properties to that at French Lick and West Baden; (b) King's, Payne's and other mineral springs in Clark County; (c) the artesian well at Worthington, and (d) those at Spencer; (e) the mineral spring near Corydon; (f) the Zorn and Blair mineral wells near Michigan City; (g) the Feldun Fields wells near Avoca, Lawrence County; (h) the artesian well at Shoals, and (i) the one at Winamac; (j) the Mudge artesian well near Medaryville, and (k) Snowden Springs, near Bainbridge. At the most of these the surroundings are or can be easily made picturesque, while facilities for recreation can be readily established.

"It is the writer's opinion, based on personal experience, that the change of surroundings and diet, the increased amount of recreation and exercise, obtained by a few weeks spent at the sanitariums and resorts, have quite as much to do with bringing about a cure of many patients as does the water itself.

"From twenty-three of the more important and best known mineral springs and wells in the state the water is bottled and sold. This industry is constantly increasing, the sales for 1905 amounting to \$435,182, as against \$376,485 in 1904."

To be sure, it is "going it a trifle strong" when Mr. Blatchley gives the opinion that the undeveloped waters are equally as valuable therapeutically as those of French Lick and West Ba-

den, but in our admiration for Mr. Blatchley's sentiment and sense, we are inclined to overlook his excess of enthusiasm. In the matter of mineral water resources, Indiana is fortunate, but does not stand alone. There is hardly a state in the Union which does not possess some good mineral waters and their development should be made a matter of state interest.—*The Chicago Clinic*, December, 1908.

Terre Haute Sends Eight Children to the Pasteur Institute.

TERRE HAUTE, INDIANA, November 9.—Eight children, bitten by pups which had been fed by a mother afflicted with rabies, were taken to Chicago last night for treatment at the Pasteur Institute. The mother dog was killed not because it was believed to be mad, but because it was believed she had an incurable ailment. The pups were distributed among neighbors.

Peter Grosse, twelve years old, one of the boys bitten by the pups, died last Friday. The other victims are Anna and Harry Grosse, his sister and brother; Cecilia A. Cousin, Charles, John and Lulu Gary, Lena and Walter Endicott. The children range in age from two to four years. The families are poor and \$600 was raised by popular subscription to send the children to Chicago. Probably twenty persons were bitten by the pups.—*Indianapolis News*.

Mr. Spofford's Marvelous Memory.

A more remarkable memory than that of the late Ainsworth R. Spofford is not often recorded. Of untiring industry and the widest knowledge he could yet retain details in a way to stagger every one who witnessed an exhibition of his powers. In the days of the old Congressional Library, when, for lack of space, books were piled up in every direction, on chairs, desks, tables and the floor, Mr. Spofford could go to a pile and select the book he wished with unerring accu-

racy. Nor was this knowledge confined to his own library. It is related of him that on one occasion, after failing to satisfy Gen. Lew Wallace by giving him the books on a certain subject in the Congressional Library, he told the general that the volume he ought to see was in the Harvard library, and gave him its title, library number, shelf number and the position the volume occupied on the shelf—"sixth from the south end."

If there is an exaggeration in this, it is slight; and, in addition to memorizing such things, Mr. Spofford had a fairly encyclopedic knowledge on all topics of human interest. He himself was for years the Congressional Librarian, at least to all intents and purposes, and the number of congressional and senatorial speeches he influenced would run into the thousands. When the new library was completed Mr. Spofford's services were retained, despite a lack of business instinct. And no Government servant ever deserved more consideration at its hands.—*New York Evening Post*.

Francis Galton.

Mr. Francis Galton, who has attained the age of 86, but still is full of mental vigor, has published an autobiography entitled "Memories of My Life." Though not a physician, he has, like the great Pasteur, done work of the greatest value to medicine. The grandson of Dr. Erasmus Darwin and the cousin and life-long friend of Charles Darwin, he has made contributions to biology only second in importance to those of the author of "The Origin of Species." His books on "Hereditary Genius" and "Human Faculty" are two of the most original works of the last century. He was a student of medicine, when in 1844, on the death of his father, he found himself with a fortune sufficient to render him independent of the profession. He gave up medicine and took to travel. He explored southwest Africa and was awarded the

medal of the Geographical Society and elected a fellow. He is perhaps best known to the general public by his system of identification by fingerprints, which in our prisons has superseded Bertillon's method of measurement. No one has done so much to build up a science of heredity as applied to man, and his efforts to found a new science—Eugenics or race improvement, alone entitle him to fame. Evolution has hitherto taken place chiefly by means of natural selection, which makes for the good of the race, but takes small account of the individual. According to Mr. Galton, man, "gifted with pity and other kindly feelings" may, in the course of time, devise some means of replacing natural selection "by other processes that are more merciful and not less effective."—London Letter to *Journal A. M. A.*

Drop the Ether This Way.

Joseph E. Lumbard, of New York, suggests a simple method of using ether by the drop method, without any elaborate apparatus, directly from the original can. The tin covering the neck is carefully cut around two-thirds of the way and turned back so as not to break. A thin wick of absorbent cotton is placed in the angle between the neck and the flap, so that it is held in place while the flap is folded down. By tilting the can the ether may be made to flow along this wick in drops. The advantages are availability, simplicity, and cleanliness.—*Medical Record*, October 24, 1908.

State Chemist Barnard Fights Bleached Flour.

H. E. Barnard, the Indiana State Chemist, and several of the prominent millers of Indiana have locked horns over the process of bleaching flour, which Mr. Barnard claims is injurious to health. Mr. Barnard has been here during the last few days and has used his influence in support of Dr. Wiley,

of the Bureau of Chemistry, who is trying to get a ruling that will require the millers of the country to label such flour "bleached." While Mr. Barnard was in Washington several prominent Indiana millers, including Wilbur Erskine, of Evansville, E. H. Evans, of Indianapolis, M. S. Blish, of Seymour, George H. Lewis, of Lawrenceburg, and others, were presenting arguments to the Secretary of Agriculture against the proposed change of labels.

Dr. E. F. Ladd, the health officer of North Dakota, who was here assisting Mr. Barnard, reported to the Secretary of Agriculture the result of a series of experiments in feeding bread made of bleached flour to rabbits. The quantity in each case was a quarter of a loaf.

He reported that the rabbit that ate a quarter of a loaf of overbleached bread died in fifteen minutes and that the animal that ate the quarter of a loaf of bleached bread died within an hour. The millers contend, on the other hand, that the bleaching of flour is not in the least deleterious to health.

Dr. Barnard has a way of getting things done. He is assisting Dr. Hurty in his great work of getting people to live longer and be happier. The above note is from the Washington press dispatch.

White Plague Exhibition in New York.

NEW YORK, December 1.—The Charity Organization Society began last night its campaign of education in curing and preventing tuberculosis with a mammoth exhibition at the Museum of Natural History formally opened by Mayor McClellan. The exhibition, to which 50,000 feet of floor space is devoted, for the exhibits from every State of the Union and from fifteen foreign countries, is but part of the present campaign. Advertising and educational posters regarding the exhibition and the methods shown have been placed by hundreds of thousands through Greater New York, and

more than a million leaflets are being circulated. Some objection has been made to the realistic character of many of the figures and tenement-room reproductions at the museum and to the illustrative paintings. But those in charge explain that experience has shown the necessity of vividly impressing the seriousness of the disease against which they are fighting.

Pneumonia Days are Here—"The Saddest of the Year."

"The pneumonia days have come," said Dr. J. N. Hurty, secretary of the State Board of Health to the reporter of the Star December 3, 1908.

Dr. Hurty declares the statement a true one because cold weather has come, which means that the people will house themselves more closely than before, and get their bodies in condition for the disease. To warn the people of the state against the danger, he is preparing some information in pamphlet form for general circulation, the advance sheets of which were in his hands.

ADVICE OF DR. HURTY.

Dr. Hurty's warning states that in December, the pneumonia month, not less than 230 persons, now well and strong, will lie dead of pneumonia in the state of Indiana. This has been the rate in previous Decembers. He says: "Be temperate in drink and food, sleep not less than eight hours in an extra ventilated bedroom, and don't ride inside steam or trolley cars when the air is foul. To breathe foul air is a good way to lower the body's disease resisting powers."

He gives the following sarcastic advice: "To bring the disease whenever you want it, drink freely of stimulants, take a few cocktails or highballs, many cups of coffee and many cups of tea every day; eat quantities of meat and salad, dig into society hard and exhaust your strength; practice all kinds of intemperance, be sure to keep out of the fresh air; don't ventilate your bedrooms, library and office, and ride in

the close, thrice-breathed air of the trolley cars. If doing all these things doesn't bring you pneumonia, then you are indeed extra strong. So many business men have pneumonia. They attend a convention, enjoy a big 'feed,' spend much time in the hotel buffet with tobacco smoke and bad air, and then go home in a sleeping car berth with curtains tightly drawn. Pneumonia has been termed 'the Captain of the Men of Death.' It is increasing in the cities at a rapid rate, and slowly increasing in the country. A very large proportion of pneumonia cases which recover afterward die of consumption."

University of Louisville Medical Department.

The first session of the consolidated medical schools, the University of Louisville, was opened under most auspicious ceremonies on Monday, November 16, 1908, in the lecture room of the former Louisville Medical College, at First and Chestnut streets. The opening exercises were presided over by the President of the Medical Faculty, Dr. J. M. Bodine, and addresses were made by Dr. Aud, D. M. Griffith and J. M. Mathews, President of the State Board of Health.

Between 600 and 700 students have matriculated, and every one connected with the institution is enthusiastic over the success of the merger.

Particular attention has been paid to the laboratories, and the employment of trained men who will devote their entire time and energies to conducting their laboratories. This is a departure which will be greatly appreciated. Dr. Cyrus W. Field, of New York City, formerly connected with the Department of Public Health, is Professor of Pathology, Bacteriology and Hygiene, and Dr. J. A. McCracken, of Bowling Green, is Director of the Laboratory of Physiology, Histology and Embryology. Dr. Carl Weidner will have charge of the laboratory of Clinical Pathology, which of itself is guarantee

of excellence of the work to be done in this department.

All of the laboratories, except that of Clinical Pathology and Anatomy will be conducted at the First and Chestnut streets building, the Clinical Pathology laboratory at the Clinical building on Sixth street, and the dissection at the old University building, at Eighth and Chestnut streets.

The enthusiastic support given the Dean, Dr. Thos. C. Evans, by the Executive Committee, and the combined faculties, in every department, the large and enthusiastic student body, makes the dream of years an assured fact, one united medical college, and that an integral part of an established university—*Louisville Monthly Journal of Medicine and Surgery*, November, 1908.

Chicago's Hungry Children.

The report of Supt. Bodine of the Compulsory Education Department of Chicago last month startled the public and brought before the school authorities a problem which will prove annoying and difficult of solution. Mr. Bodine declared that there are five thousand children who come to their classes daily without a proper and sufficient breakfast, and that at least ten thousand more suffer from malnutrition nor are habitually underfed.

A careful and thorough investigation is now being made by nurses and physicians, and it is stated that the numbers given by Mr. Bodine will probably be reduced to a considerable extent.

The Chicago situation demonstrates the necessity for a more general introduction of medical inspection and the employment of school nurses. The child who is habitually underfed or is suffering from an unsuited diet constitutes a distinct menace to the school in which he is present. It is but natural that his mental vigor is impaired and that his physical condition is indicative of his character and disposition.

The present situation has shown one fact: the public school is and must be a means of discovering destitution among school children when and where the ordinary civic and charitable organizations cannot penetrate. When a child is sent to school in a famished condition, there must be extreme poverty in the home affecting younger or older children who are not in the school; when a child shows signs of malnutrition, there usually are unsanitary and neglected conditions in the home.

Mercurial Treatment for Late Manifestations of Syphilis.

Abstract.—It is now almost universally taught, and so accepted that the later so-called tertiary manifestations of syphilis are more favorably affected by the iodids and, therefore, ought to be treated with iodin in preference to mercury. The usual employment of mercury in the form of pills, or rather internal methods or of inunctions, rather perfunctorily applied, is largely responsible for this doctrine. Those who have had experience with injections of insoluble salts have been tempted to use the injections also for gummatous and other late symptoms, particularly visceral ones, and have obtained excellent results. A negative result of the administration of iodids can not be any longer accepted as a proof of the non-syphilitic character of any affection, particularly of the viscera, and the nervous organs. The presence of *Spirochoeta pallida* in tertiary lesions may to a certain extent explain the effectiveness of mercury on the same.—Herman K. Klotz, New York.

The Action and Dosage of Phenolphthalein.

Warren Philo Elmer, of St. Louis, Mo., describes the physiological action and properties of phenolphthalein as ascertained by him from experiments upon dogs, and as a result of the treatment in one hundred and sixteen cases of various kinds. He concludes that this drug is an intestinal irritant, but

its action is accompanied by very little discomfort. It is nontoxic in doses up to twenty-five or fifty grains. It is very stable, and little of it is broken up in passing through the body. A small amount is absorbed and excreted by the kidneys. The average dose may be placed at one to five grains, best given in powdered form, at night or in divided doses after meals. In cases of hyperacidity it may be given with an antacid powder. It is odorless and tasteless.—*Medical Record*, November 14, 1908.

Awards Given by International Tuberculosis Congress.

Awards to successful competitors in the exhibition, which formed an essential part of the recent International Congress on Tuberculosis at Washington, D. C., were announced October 11, 1908, as follows:

For the best evidence of effective work in the prevention of tuberculosis since the last congress, in 1905, cash prizes of \$500 each to the Women's National Health Association of Ireland and to the New York Charity Organization Society; gold medals to the Swedish and Boston associations.

The prize of \$1,000 for the best exhibit of an existing sanatorium for the treatment of curable cases was divided, \$500 being given each to the White Haven (Penn.) Sanatorium and the Brompton Hospital Sanatorium, of Frimley, England; gold medals to the Doelitz Sanatorium, of Berlin, and the Adirondack Cottage Sanatorium, Saranac Lake, N. Y.

For a furnished house for the families of the working class, gold medals to Milton D. Morrill, of Washington, and Jose F. Toraya, of Cuba.

One thousand dollars to the Henry Phipps Dispensary, Baltimore, for the best exhibit of a dispensary for treatment of the tuberculous poor; gold medals to the Manhattan Tuberculosis Dispensary, of New York, and the Henry Phipps Institute, Philadelphia.

To the Brompton Hospital, of Lon-

don, the \$1,000 prize for the best exhibit of a hospital for the treatment of advanced pulmonary tuberculosis; gold medals to the Loomis Sanatorium, Liberty, N. Y., and the Massachusetts State Hospital, Tewkesbury, Mass.

The prize of \$100 for the best educational leaflets, to the Pennsylvania Society for the Prevention of Tuberculosis, Philadelphia, and the Verein für Bekämpfung der Schwindsucht, Chemnitz and Umgebung; gold medals to Dr. O. D. Wescott, Denver; Dr. H. S. Goddall, New York, and George H. Kress, Los Angeles.

New York won the gold medal for the best exhibit sent in by the states illustrating effective organization for the restriction of tuberculosis. A gold medal went to Germany for its national exhibit on this subject. For the best contribution to the pathological exhibit gold medals were presented to the United States bureau of animal industry and to England. Wisconsin won the gold medal for an exhibit of the best laws and ordinances in force in June, 1908, for the prevention of tuberculosis, while New York city won a gold medal for the best repressive municipal laws.

Whisky Always Whisky.

BALTIMORE, MD., November 30.—Dr. Joseph P. Remington, dean of the Philadelphia College of Pharmacy, was the star witness in the whisky seizure case now being tried in the United States Court. Whisky, Dr. Remington said, first appeared in the pharmacopeia in 1860. It was defined in that work under the Latin name *spiritus furmenti*, the name by which it was prescribed by physicians. The definition stated that *spiritus frumenti* was obtained by a distillation of grain and contained about 60 per cent. pure alcohol.

On cross-examination attorney Moses R. Walter, who is defending the Louisiana Distilling Company, took exception to the definition which appears in the 1880 edition of the work as compared with the definition in the

earlier edition. Reading from that edition attorney Walter found that whisky consisted of a distillation from Indian corn, rye, wheat and barley. In the definition in question it was also stated that whisky must be four years of age to be genuine. Attorney Walter also took exception to that.

"You don't mean," he asked the doctor, "that whisky is not whisky until it is at least four years old?"

"The book does not say so," answered Dr. Remington. "It says that whisky prescribed by physicians must be at least four years old."

Senator Beveridge on the Physician.

"Have your doctor look, you over every six months, no matter how well you feel—or oftener, if he thinks best. Have your regular physician. Pick out a good one, and, especially, a man congenial to yourself. Make him your friend as well as medical adviser. The true doctor is a marvelous person."

"How astonishing the accurate knowledge of the accomplished physician. How miracle-like the dainty and beneficent skill of the modern surgeon. The peculiar ability of a great diagnostician amounts to divination. And he, whom Nature has fitted for this noble profession, is endowed with a sympathy for you and an intuitive understanding of you very much akin to the peculiar sixth sense of women—that strange power by which she 'knows and understands.'"

"If your machinery is out of order, he will tell you so, and do what is necessary to repair it. He will comfort and reassure you, too, and administer to the mind a medicine as potent as powder or liquid. But you will get no false sympathy from him. If you have nothing the matter with you, yet think you have, your doctor will take you by the collar of your coat, stand you on your feet, and bid you be a man. Be a faithful guardian of the treasures Nature gave you."

The above is from Senator Beveridge's recent book of advice to young

men called "The Young Man of the World," issued by the D. Appleton Co. and already in its second edition. Like all truly discerning statesmen—Goethe, Cleveland, Roosevelt,—as well as the great poets and novelists, Senator Beveridge fully appreciates the physician. There is no better test of a man's judg-

Serum Diagnosis of Syphilis.

William J. Butler, M. D. (*Journal A. M. A.*, September 5, 1908), describes in detail the Wasserman reaction in syphilis, discussing the literature to date on this important subject, and reports his results on 125 cases. Wasserman and Plant examined the spinal fluid of 41 progressive paralytics and obtained a positive reaction in 78 per cent. Nineteen controls, whose spinal fluid was examined, all gave negative results.

Schutze examined 12 tabetics and found anti-bodies in the spinal fluid of eight.

Margenroth and Steotz obtained a positive reaction with the spinal fluid of eight paralytics and a negative reaction with the lumbar fluid of eight control cases.

Marie and Levaditi confirmed the findings of Wasserman and Plant by reporting a positive reaction with the spinal fluid of 73 per cent. of 39 parasites, 4 out of 5 tabetic paralytics and 2 out of 4 tabetics. They had negative results in a number of controls among cases with diseases of the nervous system not depending on syphilis.

The author describes in detail the substances employed in the reaction and their preparation.

The author groups his 125 cases under two main heads, with subdivisions.

First, cases with manifest or suspected syphilis and cases giving a history of syphilis.

Second, cases with lesions of the nervous or cardiovascular systems in which syphilis was either acknowledged, denied, suspected or unsuspected.

Of the first division there were 61 cases.

1. There were in the primary stage, either with initial lesions, or before appearance of secondary symptoms, 4 cases; 4 positive.

2. In the secondary stage, 25 cases; 24 positive, 1 negative.

3. In the tertiary stage, 17 cases; 16 positive, 1 negative.

Of the latent cases there were 15; 8 positive, 7 negative.

In the second division there were 44 cases; positive reaction in 75 per cent. Forty per cent. of these either had no knowledge of infection or denied same.

His conclusions are as follows:

"It is found positive in from 90 to 95 per cent. of all cases with syphilitic manifestations.

It is found positive in 50 to 60 per cent. of latent cases.

It is found positive in from 70 to 80 per cent. of parasymphilitic diseases.

The reaction is in many cases influenced by treatment of the patient and it is not improbable that this number would be greatly increased if the reaction were pursued throughout prolonged treatment.

A positive reaction indicates activity of the specific virus and is an indication for anti-symphilitic treatment.

While a positive reaction indicates syphilis, a negative reaction does not have an equal negative value.

It is diagnostic of a systemic infection whether acquired or inherited and not an organ diagnostic measure.

"The reaction will be found of enormous advantage in differential diagnosis in every department of medicine."—*St. Louis Medical Review*.

The Treatment of Syphilis by Arylaronates.

Col. F. J. Lambkin, R. A., M. C. (*Brit. Med. Jour.*, August 15, 1908), reports the results of a large number of cases treated with "atoxyl" and "saomin." As a result of the apparent beneficial effects which had been obtained from the use of "atoxyl" in sleeping sickness, it was suggested by Uhlenhuth that this drug might prove successful in syphilis, the latter being, like

sleeping sickness, a protozoal disease. Hallopeau and Salmon experimented with a certain amount of success. The author's report covers an experience of one year. During the first four months atoxyl was used, giving three grain intramuscular injections every third day for ten days, then allowing an interval to elapse before more was administered. Results were encouraging, but about this time reports were being published as to the toxicity of the preparation, consisting of gastrointestinal pains, malaise, nausea, vomiting, painful micturition, and in some cases ending in blindness, of which the author saw three cases while in Africa. He had none of these ill effects in his cases and thought them due to impure preparation of the drug. The last eight months he has used "saomin." The drug contains 22.8 per cent. of arsenic, equivalent to 30.1 per cent. of arsenious acid. Its toxicity is less than one-fortieth that of arsenious acid. Beginning with three-grain injections every third day he gradually raised it to ten grains every other day until 100 grains had been given. This seemed sufficient for physiological effects and he did not care to subject patients to uncalled-for risks. The drugs are valueless given by the mouth, as they are broken up by the contents of the stomach and the effects of over-treatment by arsenic are thus more easily produced. It is given by intramuscular or subcutaneous injection—preferably the former, and using the buttock.

Of 65 cases treated by the drugs, the results were as follows: Forty-nine cases, although kept closely under observation, have had no further development of the disease. Eight men suffered recurrences, two of them from breaking down of the old sore, two from reappearance of rashes, two from mucous patches and ulcers of the throat, one from chancre of lip broken down and one from postular eruption. The recurrences were very mild and disappeared after a short course of saomin. Ten cases which had had no re-

currence of symptoms had a second course and so far have shown no further signs of disease.—*St. Louis Medical Review*.

Diphtheria of the Skin.

(1) Impetigo and Ecthyma Due to Bacillus Diphtherial. R. Labbe and Demarque. (*Rev. Mens. des Mal. de l'Enfance*, February, 1905. Vol. XXIII, p. 49).

(2) Diphtheria of the Skin of Three Years' Duration Treated by Antitoxin. A. B. Slater. (*Lancet*, Jan. 4, 1908.)

(3) A Case of Severe Ecthyma from which Diphtheria Bacillus has been Isolated. (*Lancet*, Feb. 1, 1908.)

(4) Diphtheric Dermatitis (Case 4, with the Clinical Picture of Infantile Ecthyma). A. Schucht. (*Archiv. f. Derm. A. Syph., Neisser's Festschrift*, 1907, p. 105.) (*Abs. Brit. Jour. Derm.*, July, 1908).

The first cases of cutaneous diphtheria were described by Trousseau and others in the early part of the nineteenth century, and consisted of Diphtheric membranes formed on pre-existing skin sores or wounds. In some the lesions were extensive and many were fatal.

These cases recorded by Slater and Eddomes, Schucht's fourth case and the earlier cases of Labbe and Demarque, the reports of which are abstracted below, form a third and hitherto unrecognized form of cutaneous diphtheria.

(1) Cases of Labbe and Demarque. Case I.—A child, aged 4 years, with an impetigenous and ecthymatous eruption disseminated and generalized. On the right side of the trunk and on the right thigh there were a number of rounded, sharply defined ulcers, pustules with umbilicated center, and crusted nummular patches. About the rest of the body were raised polycyclical macules. Throat reddened but no membrane. Temperature normal and general condition good. Cultures from lesions yielded staphylococcus and Loeffler's bacillus. Anti-toxine was

given. Recovery took place, with scarring at the site of the lesions.

Case II.—Infant, aged 2 years and 5 months. There was impetigo of the scalp and face, vesicles and crusted lesions, a large excoriated area around left ear, lips excoriated and a crusted patch on the arm.

Death took place from pneumonia. Loeffler's Bacillus and staphylococcus and streptococcus were obtained from a lesion on chin. Both cases suggested ecthyma, but the tenacity of the lesions led to their more careful study. There were no false membranes in either case.

(2) Slater's Case.—A girl aged 15 years. She had suffered continuously for 3 years with a widespread vesicular eruption, resembling herpes. The lesions were mainly upon the face, scalp and ears, neck, trunk and vulva. Loeffler's bacillus and staphylococcus were found by culture in the lesions and positive results were obtained by inoculation of a guinea pig. It cleared up in three weeks with antitoxin injections. The affection appeared to have started in the conjunctiva three years previously.

(3) The case of Eddomes and Hare was in a girl aged eleven. The eruption was vesicular and bullous and confined to the arms, hands and lips. Klebs-Loeffler bacillus was found, and the recovery was rapid under antitoxine injections.

(4) Schucht's fourth case was in a boy, aged 3 years, and presented the clinical picture of infantile ecthyma with ulceration of the lesions. Loeffler's bacillus was found in the lesions. Child died of tuberculosis and meningitis from an otitis media.—Abstract by Dr. W. H. Mook in the November *St. Louis Medical Review*.

Denatured alcohol will receive a needed Government "boost." Despite its freedom from taxes the last year official reports say that not one new industrial still was set up in the United States, while American production was only 7,000,000 gallons, against Ger-

many's 120,000,000. To remedy this neglect of what is abroad a cheap fuel and source of light and power the Department of Agriculture has equipped a plant at Washington to test material and processes.

Some Remarks on Coroners and Their Duties.

BY JOHN W. BRODNAX, M. D., MANCHESTER, VA., CORONER, CITY OF MANCHESTER; DEMONSTRATOR OF ANATOMY, UNIVERSITY COLLEGE OF MEDICINE, RICHMOND, VA.

The duties of a coroner can be expressed in a general way as consisting principally of investigating all deaths of persons, whether sudden or otherwise, whose manner of taking off creates suspicion that the death might have resulted from foul or other unlawful means.

According to the *American Law Register*, the proper cases for the coroner's office are sudden deaths, violent and unnatural deaths. These are from their nature suspicious, and an inquiry into the circumstances of all such cases should be made by the coroner, although an inquest need not necessarily be held. There is no necessity for a coroner to hold an inquest in any case that he investigates, unless this preliminary investigation reveals facts concerning the death sufficient to create in his mind a reasonable belief that it resulted from some unlawful means.

The decision of the question as to whether an inquest should be held or not is left entirely to the discretion of the coroner; and if there is nothing material to be gained by it, the coroner is not justified in putting his county or corporation to the additional expense of inquest.

As regards sudden deaths; I think it reasonable to assume that any death occurring within twelve hours from the time the deceased was in his usual health, should be considered sudden. It is certainly unexpected, and, consequently, suspicious, and the responsi-

bility on the coroner to make inquiry into it is in no way lessened by the fact that there was a physician present just before or after the death of the person. That the attending physician is equally as capable of determining the cause of the death as the coroner is not questioned. It would be presumptuous to claim for the latter any superior knowledge in that respect over the physician; but the coroner is the proper legal authority to decide these cases; the physician is not.

The law assumes that the physician in attendance on a person dying under suspicious circumstances may himself, in some way, be *particeps criminis* until an inquiry by the coroner exonerates him. The impropriety of the attending physician issuing the certificate of death in these cases is evidenced by an act of parliament relating to inquests, which states in part, that "if any person state on oath that in his or her belief the death of the deceased was caused partly or entirely by the improper or negligent treatment of any medical practitioner, he shall not be allowed to participate in the autopsy on the deceased," etc.

As regards violent deaths, such as murders, suicides, drownings, burnings, etc., these are all recognized as coroners' cases, and need no comment.

Regarding deaths from casualties, Dr. Lee, of Philadelphia, an eminent authority on coroner's laws, says: "Doubtless in some instances, when the faces of the case are well known beforehand (and under this heading **we include the many deaths occurring without medical attention, from natural causes which the coroner is usually bound to investigate**), an inquest is unnecessary. But as such, we cannot consider the large number of deaths occurring from casualties which it is also the coroner's duty to inquire into, in many cases it being absolutely necessary that there should be such an inquiry instituted as soon as possible after the death of the party, and when a death has been the result of negli-

gence, either real or apparent, of any firm, company or corporation, the interest of the victim's family, or of his employers seem to render such an investigation an imperative necessity."

In the case of Lancaster County vs. Dern Long, J. C. P., the court held: "That when death occurs from any violence done to a person by another, although such violence may not immediately kill the party injured, it is still the duty of the coroner to hold an inquest." This opinion having been taken to the Supreme Court on a writ of error, that tribunal approved it.

From this it would seem that the coroner should investigate all cases of accidental injuries, even when the deceased has not died immediately, but lived several days, and then died from some complication brought on by the injury. For the importance of an investigation is as great then as it would have been had the deceased been killed outright.

Under the head of unnatural deaths, I would include those persons who, in their last illness, were unattended by a physician, or in which the physician has not seen the deceased within two weeks prior to the latter's death.

Still-births and abortions of unmarried women, and deaths of infants of unmarried women, occurring within a few days after their birth, are pre-eminently coroners' cases, for in these there is a strong suspicion of crime. It is natural to suspect the woman or some interested party guilty of destroying offspring born out of wedlock. A coroner has a right to and should insist that all such cases be brought to his notice, and not leave it to the discretionary judgment of the physician who may have been in attendance as to whether he should be notified.

Deaths occurring in prisons are also coroners' cases, for it may be presumed that the prisoner possibly died as a result of ill usage on the part of the jailer.

Summing up: The following deaths may be said to be properly in keeping

with the law for the coroner to investigate, and in which to hold inquests, if, in his discretion, he sees fit:

All sudden deaths, whether violent or otherwise.

All violent deaths, whether deaths occur immediately, or the deceased has survived for some days.

All suspicious or unnatural deaths from whatever cause, such as poisonings, drownings, murders, suicides, burnings, still-births of unmarried women, and deaths of infants of unmarried women occurring within a few days after their birth.

Deaths in prison.

In conclusion, I wish to make a few remarks concerning the coroner himself—the requisite qualities he should possess in order to administer in a proper manner the functions of his highly important office. *The American Law Review* says on this subject: "The grave and important powers lodged in the hands of a coroner, combining in his person the function of medical expert and a judge, is sufficient warrant for a careful selection for the filling of such an office."

A coroner should be a person of high standing in the community. He should be a competent physician, who, by an intelligent examination would, in most cases, be able to decide that the death was natural, and no further examination needful. His knowledge should embrace both the legal and the medical aspects of his office. In order to do justice to his position, he should be well informed on such branches of medicine as are necessary for the conduction of a thorough and scientific legal examination and autopsy. A good knowledge of anatomy, physiology and pathology is essential.—*Virginia Medical Semi-Monthly*, November 27.

Deep unto deep may call, but I
With peaceful heart will say—
Thy loving-kindness hath a charge
No waves can take away;
And let the storm that speeds me home
Deal with me as it may.

—Anna L. Waring.

Mr. Taft and Eli Wantmore's Correspondence.

There is a shrewd suspicion that Mr. Taft has received more than one letter in something like this vein:

My Dear Sir—My name is probably not unknown to you. If you have seen it in no other connection you doubtless noticed it well up in the interesting list of public benefactors recently made public by the Hon. George R. Sheldon, of New York. While, of course, what little I could give for the cause you represent was freely given and without the least thought of establishing a claim on your generosity or in any way embarrassing you in the disposition of the offices within your control, still since the election many of my friends, on whose judgment I most rely, have thought that it would not be fair to you for me to remain silent, when the country is in peculiar need of able and experienced men. I am, therefore, constrained to offer my services on the altar of my country—our country, I ought rather to say. Command me for any important post commensurate with my dignity. Very respectfully,
ELI WANTMORE.

And it is believed that Mr. Taft has a stereotyped reply to such patriotic and self-sacrificing communications, which reads something like this:

My Dear Sir—Your highly interesting letter has been received. Of course I could not be ignorant of a man of your character and reputation. Your letter, therefore, was no surprise to me. Its spirit of devotion to the public cause is most pleasing to me. Of course, it may be impossible for me to appoint to office all who supported me, but I shall do the best I can. I have been thinking perhaps you would like to go as special envoy to the Society Islands or how would the consulate of the Scilly Islands do? Yours confidentially.

In a lecture on flies before the Royal Photographic Society of London, F. P. Smith said that with a little patience flies could be trained, and he showed some cinematograph records of flies lying on their backs twirling miniature dumb-bells, balancing weights bigger than themselves, climbing revolving wheels and acting as nursemaids, holding dummy babies. Accurately balanced little machines were used for training the flies, and the only discomfort to the insect, said the lecturer,

was involved in its being imprisoned for a day or two. On being released although its wings were uninjured, it had no desire to fly, but showed tractableness and readiness to perform these extraordinary gyrations instead.

Anesthesia.

DR. JOSEPH C. BLOODGOOD, ASSOCIATE PROFESSOR OF SURGERY IN JOHNS HOPKINS UNIVERSITY, BALTIMORE — ABSTRACT FROM DECEMBER (1908) ISSUE OF HARE'S PROGRESSIVE MEDICINE.

During the last year, in my experience with anesthesia and thoughts on this subject, I have become more and more convinced of the importance of recognizing and developing the psychical element as well as the details of the mechanical part of the technique of its administration. In the early literature on local anesthesia the term "moral anesthesia" was employed by many with large experience in this method. By this term they meant the psychic influences on the conscious patient. Crile, in a recent paper on the treatment of exophthalmic goitre, has brought out, in a very lucid way, what I wish to illustrate. He is of the opinion that some of the deaths in the extreme grades of Graves' disease are the effects of fear, and other mental excitations, on the secretion of the thyroid, which is already overabundant, and, perhaps, pathological. He claims that these fears and excitations can be eliminated, the dangers of anesthesia and operation reduced, and the mortality lessened. His method is somewhat as follows: The patient, on admission to the hospital, is told that she will get well if she will submit to the proper treatment, and that perhaps an operation may not be necessary, but she must give her consent to an operation should it become necessary at any time. The patient is then placed in bed at absolute rest, and the usual method of treatment for exophthalmic goitre employed. In addition, the special anesthetist visits the patient daily,

places a cone over her face, which contains some volatile oil; she is told this is part of the treatment; each day she is told that she is better, and perhaps an operation may not be necessary. On the day decided on for operation the patient is told that she is doing so well with the inhalation treatment that it is proposed to make it a little stronger. Without her knowledge ether is substituted, she is anesthetized, taken to the operating room and lobectomy performed. Crile claims to have reduced the mortality and post-operative thyroid intoxication in this class of cases. Perhaps some readers of this and of Crile's article may be skeptical. It will probably require a larger experience to demonstrate that it actually does reduce the mortality. My experience, however, entirely agrees with that of Crile. It agrees with all the recent literature on the psychic phenomena of both mental diseases and diseases outside the nervous system.

Speaking specifically again of anesthesia, in the past few years I have attempted to cultivate the art of suggesting to the patient that an operation is necessary, or may be necessary in such an optimistic and happy manner as to relieve him of the mental anxieties as much as possible. I have attempted to create in the hospital an atmosphere and an environment for the patient that will be most favorable to carry on the continuity of this good impression. In the majority of patients I find that it is best to operate upon them as early as possible in the morning, selecting the more nervous patients, if possible, first. In the preparation for operation cathartics are not given on the day preceding the operation, but on the day before this. The day before the operation, especially in abdominal cases, nothing is given by mouth except white of egg and water. It is carefully explained to the patient that all these preparations make everything easier and more comfortable for them. The enema is given the night before, instead of the morning of the operation. If possible, the patients are brought

directly into the operating room, the field of operation prepared on the operating table, and they are placed in the proper position for the operation before anesthesia is given. It is carefully explained to the patient that this is done to reduce the duration and quantity of the anesthetic; that this reduces even the slight dangers of the operation, and as a rule prevents postoperative discomfort and nausea. Almost every patient comes to operation carefully prepared by his friends with the knowledge that he will be **fearfully** and wonderfully seasick after ether, and I am convinced that many of the postoperative complications are psychic, suggested by the past experience in surgery when ether was badly given and everything was done to suggest to the patient that he had an ordeal to go through. There is no doubt that the preparation of the patient before the anesthetic is begun reduces the time and the quantity of the anesthetic. Harvey Cushing in his recent splendid article on the technique of craniotomy emphasizes this point.

I am convinced that since I have attempted these modifications the patients have had less anxiety before operation, the anesthesia has been more quiet, and postoperative nausea and vomiting greatly decreased. In looking over the literature of anesthesia, and finding such a diversity of views during its development as to the proper anesthetic and apparatus, one can not but become convinced that the better results in the hands of an enthusiast with his new method may be largely due to psychic influences; the suggestion to any patient that this is a new method, better than any yet employed, is of itself a good influence which bears fruit. Frequently, in my own experience, when patients who had taken ether before, said: "Please don't give me ether; it made me so terribly ill after the last operation"; and when I replied: "Don't bother about that, we give ether by an entirely new method and patients very rarely suffer from postoperative nausea or vomiting," as

a rule it has had the desired effect both as to relieving the immediate anxiety and in the postoperative course. There is, of course, no question that we do give ether better, and less of it, now, and this explains some of the better results, but not all. I am convinced that the psychic element of anesthesia is an important one to consider.

As an illustration, of which there are many others, Williams divides the vomiting of pregnancy into two types: one, psychic, cured by suggestion; the other, toxic, which can only be relieved by emptying the uterus. Surgeons and physicians must not carry the psychic treatment of their patients to an extreme degree; it must not become a fad, because this will certainly lead to a harmful reaction. But this question is one for every thoughtful physician and surgeon to consider, and I am especially anxious to do my part in stimulating the thought of its employment when surgery and anesthesia become necessary.

Scopolamine-morphine Narcosis.—The consensus of opinion in recent literature favors the employment of this hypodermic method only as a preliminary to ether or chloroform. Hotz gives his experience with 1,500 cases. The evening before operation the patient is given veronal; on hour before operation an injection of scopolamine and morphine, a moderate dose: scopolamine gr. 1-100 for the male and gr. 1-150 for the female; morphine, gr. 1-6 for the male and gr. 1-12 for the female. After this the quantity of ether or chloroform required is very small. Fifteen hundred cases, however, are not enough for definite conclusions as to postoperative complications. He claims they are less. It is a good adjunct, then, apparently, for ether or chloroform. It is difficult, however, in an active clinic to know for all cases when the hour before the operation will be, but it seems to me that it is justifiable to try it as an adjunct only. It can also be employed before local anesthesia. It is contra-indicated in exophthalmic goitre and in delirium tremens.

It should be employed in tetanus. Zeller practically comes to the same conclusions from an experience of 182 cases. Durand finds it very satisfactory for children. Hirsch is of the opinion that in operations upon the mouth and pharynx the long postoperative sleep is a disadvantage.

General Anesthesia per Rectum.—I have witnessed this method of narcosis by my colleagues in Boston and New York, at meetings of the Clinical Society of Surgery. There is very little recent literature on this subject. Vidal says: The principles of the method are as follows: The alimentary tract must be cleaned first by a cathartic and then by an enema of 2 liters of fluid containing 2 gm. (gr. 30) of carbonate of soda. The latter is employed to clear the mucous membrane of fat. Half an hour before the anesthesia morphine is given hypodermically, the patient is placed in the middle Trendelenburg position, and a rectal tube introduced. The ether forced by bellows into the tube should pass through an empty flask which rests in a hot water bath at 39 degrees C., so that the ether vapor is warm. According to Vidal this method is indicated when respiratory complications are threatened. I mention this method because, perhaps, in the development of surgery of the chest it may find larger application and the mouth can be used entirely for the maintenance of overpressure in the lungs.

That the extreme cyanosis is not necessarily due to any obstruction in the respiratory tract, but to an overdose of the anesthetic, was demonstrated in one of the cases I witnessed. The complication appeared as critical as any I have ever observed in narcosis by ether in the ordinary method. In many operations upon the head and neck it would be very convenient to get rid of the anesthetic paraphernalia in that region, but up to the present time the technique and art of rectal anesthesia have not been sufficiently developed to justify substitution.

Local Anesthesia.—There is very lit-

the recent literature on this subject, but apparently it still ranks with general narcosis, and is the method always to select if the operation can be properly and painlessly performed. Roith, in an excellent paper on the indication of the various methods of anesthesia, practically comes to the same conclusions that have been discussed in the previous numbers of *Progressive Medicine*. He advises novocaine and supra-renal tablets in salt solution. The majority of patients are given previously morphine, or morphine and scopolamine, and very nervous patients veronal some hours before the operation. Unless one can infiltrate beyond inflamed tissue, he should not attempt operation on inflammatory lesions under local anesthesia. Schleich still recommends cocaine and alypin, the formulae for which I gave last year.

Colmers gives a new application for local anesthesia to demonstrate in accident cases whether the patient is a malingerer or not. If the local pain complained of in the region of the skin or muscles is relieved by infiltration of cocaine, he looks upon this as evidence that the patient is really suffering. However, he gives no examples of negative observation.

It is to be remembered that in local anesthesia there may be a toxic effect from any of the drugs employed, and in my experience this danger is better avoided by the employment of weak solutions, but I would urgently advise always to be prepared for syncope in local anesthesia, and always operate, if possible, in a reclining position. If not, be prepared to place the patient in this position rapidly. Now and then the syncope may be psychical. In a recent operation on a small dental cyst on the upper jaw of a girl, aged twenty years, I said to her before the operation: "It is very important for you to keep quiet and keep the mouth open until the operation is over; if you do this it will be painless and take but a few minutes." She was apparently courageous, not nervous, and had a good color. The operation took about

ten minutes; it was apparently painless. At the completion I said: "Now, it is all over." The patient immediately relaxed and fainted. She told me afterward that when I said that to her she ceased her mental effort and immediately lost consciousness. In local anesthesia the depressants to be considered are psychic, physical pain, and the toxic effects of the local anesthetic used. In strong individuals these are insignificant, but in weak and nervous patients they must be considered; and if the operation is of such a nature that it would be difficult to perform it without these factors being present to a considerable degree, general anesthesia is not only safer, but more humane.

As I have stated under General Anesthesia, as our experience increases in the ether-drop method, accompanied by the adjuncts of morphine and atropine, psychic or mental suggestive influences, and in some cases a hypnotic, like veronal, the night before the operation, we find that the dangers of general anesthesia are at least no greater, and in some instances perhaps less, than local anesthesia. Due to these facts, and although surgeons are more familiar with local anesthesia, I believe its field of employment is getting rather narrower than wider, but it retains its distinct place.

Experience is also demonstrating that postoperative pneumonia is more frequently prevented by looser abdominal dressings, setting the patients up immediately after operation and getting them out of bed quicker than by the substitution of local for general anesthesia. Even when local anesthesia is employed in laparotomy in debilitated patients, the same precautions should be taken as after general anesthesia. In a very recent observation at an exploratory laparotomy in a debilitated and anemic patient with symptoms of obstruction at the cardiac orifice of the stomach I made three abdominal incisions under cocaine, let out the fluid, found a diffuse carcinoma of the stomach, closed the wound with layers of catgut, sat the patient up im-

mediately in bed, and allowed him to get up and walk after forty-eight hours. This is by no means very new, but a sufficient number of my colleagues have demonstrated the importance of such a procedure to prevent lung complications. It is another evidence that the older after-treatment, with absolute rest in bed, flat on the back, for the healing of a laparotomy wound, is incorrect. I mention this here to demonstrate that the enthusiastic reception and ready adoption of local anesthesia was due to the fault in the art and technique of general anesthesia and postoperative treatment.

Spinal Anesthesia.—Lindenstein reports on 500 cases from Goschel's Clinic in Nurnberg. On the whole they are satisfied, but they will not increase the indications in males, and shall in the future decrease them in the female. In spite of their own conclusions, a comparison of their table with 500 ether-drop narcoses or local anesthetics for the operative interventions, in which they employed lumbar anesthesia, would be very unfavorable to the latter. Cocaine was never employed. Stovaine, after the first 50 cases, was replaced by novocaine, with a few cases of tropacocaine. In their last 100 cases there were 4 failures, 2 collapses, 6 vomitings during anesthesia, and, after operation, 23 suffered from headache and 10 from vomiting. I do not think an American surgeon would be satisfied with such a record, unless general anesthesia was distinctly contra-indicated.

I shall not discuss the other literature of the year on this subject. The reading of the experience of eight or ten surgeons, with from 100 to 400 cases each, impresses me that if they were familiar with the results of good ether anesthesia, by the drop method, or local anesthesia in suitable cases, they would restrict the use of lumbar anesthesia. In fact, I would strongly advise against its employment in this country.

Complications during Anesthesia.—This subject has been considered from

time to time in *Progressive Medicine*, and experience has demonstrated that these complications are best avoided by preventive treatment; but now and then, in spite of every precaution, a complication does arise which is usually fatal unless we have means at hand for immediate action. The most serious complication is heart collapse, which is observed usually in chloroform narcosis, but is not impossible when cocaine is employed either subcutaneously or in lumbar puncture. This collapse, as a rule, takes place in patients debilitated by disease, or who are suffering from some chronic heart lesion, especially myocarditis.

Careful examination of patients before operation generally prepares the surgeon, and this heart collapse may be prevented by the use of ether. Nevertheless, any contribution as to the best method of treatment is welcome. Kothe reports his experience with two critical examples of collapse of the heart after lumbar puncture with cocaine for anesthetic purposes. Every ordinary means failed until adrenalin was injected intravenously. He gives Heinz credit for demonstrating the analeptic action of adrenal extracts. I have discussed this method previously in *Progressive Medicine*, and I agree with Kothe that up to the present time it is our best available means of resuscitation. I prefer, however, to employ Crile's method, in which 10 to 15 drops of the adrenalin solution are injected with the hypodermic syringe directly into the rubber tube which is carrying the salt solution for intravenous infusion already started. Kothe remarks that at the recent meeting of the German Surgical Congress it was concluded that massage of the collapsed heart through direct operative exposure has not proved sufficiently efficacious to justify this severe measure. At the present time I should advise the employment of adrenalin in salt solution intravenously. One should be cautious in its employment and remember that its effect is only temporary; it should not be repeated.

That massage of the heart should be attempted, especially when the collapse takes place during a laparotomy, is demonstrated in the case reported by Depage. Here during a laparotomy for gallstones, under chloroform, heart collapse took place; all ordinary means failed. It is not stated whether adrenalin was employed. The surgeon then grasped the heart through the diaphragm, using the abdominal wound for his portal of access. There was immediate response, and the operation could be completed; the patient recovered.

The experimental work on animals, which has demonstrated the toxic effect of repeated doses of adrenalin, especially marked arteriosclerosis, cannot be used as an argument against the employment of a few drops of this drug for the purpose of resuscitation from heart collapse, and I find nothing in the two most recent communications by Watermann and Shirokogoroff to contradict this statement. Repeated intravenous injections of adrenalin are apparently distinctly contra-indicated. It is of practical interest to note that these animal experiments demonstrate that the dangers are absent if adrenalin is employed subcutaneously or in the peritoneal cavity. We have, therefore, no evidence against its use in local anesthesia. I find no experimental investigation as to the general effect of adrenalin when injected in the lumbar sac. At the present time it is employed in conjunction with the anesthetic in lumbar anesthesia. We must remember, however, that adrenalin is a drug to employ with great caution.

Reviews and Book Notices.

Health and Beauty.

BY JOHN V. SHOEMAKER.

The intensely interesting character of this work is indicated by the headings of the various chapters, as follows:

The Skin and Complexion; the Ap-

pendages of the Skin; the Usefulness of the Skin and of the Hair; the Complexion; the Elements of Beauty and Grace; World Influence of Woman's Charms; Expression, Sexual Attraction, Wedlock; How to Cultivate and Preserve a Good Complexion; the Bath; Digestion and Indigestion; Education of the Body; Cultivation of the Mind; Clothing and Dress; the Influence of Climate upon Health; Ventilation; Disfigurement from Disease with Some Treatment of It; Eruptive Fevers; the Hair, its Fashions and its Diseases; the Nails and Their Diseases; Cosmetic Preparations; Index.

Few physicians come into closer sympathetic touch with the real needs and aspirations of their patients than the author of this work. He unquestionably has one of the largest and most varied practices of any living physician, and his more than thirty years actual contact with all classes, together with his remarkably clear insight into every phase of health-and-beauty giving conditions, as set forth in this comprehensive volume, enables the publishers to offer to the general public a unique hygienic work of surpassing interest and more than ordinary practical value. Price, \$3.00, Net.

F. A. Davis Company, Publishers Philadelphia, Pa.

A Book on Lincoln by Charles Moores.

Charles W. Moores, president of the Board of School Commissioners, has entered the ranks of the Indiana authors, according to his admission at the meeting of the board held last night. Mr. Moores has written a "Life of Abraham Lincoln" especially for school use. The manuscript has been accepted by Houghton, Mifflin & Co., an Eastern publishing house. The book will be issued in January. Mr. Moores sent the first four chapters of the biography to the publishing house, and it met with such approval that they ordered him to send on the rest as quickly as possible. The task, which

began in the summer, was only completed recently.

The publishing house has paid Mr. Moores the compliment to say his biography of the great emancipator is the best adapted for school use of any they have examined. "It is neither written above the student nor down to them in such a fashion as to offend," they say.

Cincinnati Physicians of the Old Times

Dr. Otto Juettner for more than a year has been gathering material with a view of preparing and publishing a complete and critical record of the men who gave Cincinnati the celebrity as a medical center it enjoyed during the greater part of the past century. The historical account of medical Cincinnati will be a complete, unbiased and accurate record of the days we love to dwell upon when we speak of "the good old times." The book will contain the portraits of most of the teaching force—famous men who left their ineradicable impress upon our city in a medical sense. The book is now nearing completion. It is to be hoped the thousands of alumni of Cincinnati medical schools, with their friends, and all medical men interested in the subject, will secure the work when published.—*Lancet-Clinic*.

Practical Points in Anaesthesia.—By Frederick-Emil Neef, B. S., M. D., New York City, 941 Madison avenue. The author in a simple book of 50 pages, sold for 60 cents, gives the methods largely followed in the German Hospital, New York City, with chloroform, ether, and also a mixture of these known as "Anaesthol." The latter is described as "a fairly stable combination of chloroform, ether and ethyl chloride in molecular proportions given by the drop method, but in slightly greater quantity than pure chloroform."

Half an hour before the anaesthol is begun one-fourth grain of morphine is given under the skin.

Whatever may be said for or against

ether-chloroform mixtures, it is certain that in the German Hospital much operating is done and anaesthesia is reduced to a science. The Journal has given this book to Dr. Paul Martin, of Indianapolis, who was a year in the German Hospital and afterwards Superintendent of the Indianapolis City Hospital, and is familiar with the methods there in use.

The Practitioners' Visiting List for 1909. An invaluable pocket-sized book containing memoranda and data important for every physician and ruled blanks for recording every detail of practice. The weekly, monthly and 30-patient perpetual contain 32 pages of data and 160 pages of classified blanks. The 60-patient Perpetual consists of 256 pages of blanks alone. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil and rubber, and calendar for two years. Price, by mail, postpaid, to any address, \$1.25. Thumb letter index, 25 cents extra. Descriptive circular showing the several styles sent on request. Lea & Febiger, Publishers, Philadelphia and New York. This is the twenty-fifth issue of this valuable list. There are four styles, adapting it to all grades of practice. The usual tables are revised and brought up to date.

The relations between anatomy and surgery are obviously closer than are possible between any other pair of medical sciences. Surgery grows out of anatomy and is conditioned by it in every step. It acknowledges its lineage by giving point and interest to the science of anatomy, which otherwise would merit the "dry bone" epithet. A book may be said to have proved its value when the public has absorbed an entire edition and demanded more. Professor Woolsey has responded to this call by performing a very thorough interstitial revision, resulting in a considerable enlargement both in text and illustrations. The pic-

torial department of the book is notable for its extreme clearness and pertinence as well as for the use of colors. The work is of equal value to the surgeon or the general practitioner having surgery to do, as well as to the student of surgery still within college walls.

Applied Surgical Anatomy, Regionally Presented. For the use of students and practitioners of medicine. By George Woolsey, A. B., M. D., Professor of Anatomy and Clinical Surgery in Cornell University Medical College, New York. New (2d) edition, enlarged and thoroughly revised. In one very handsome octavo volume of 601 pages, with 200 illustrations in black and colors. Cloth, \$4.50, net. Lea & Febiger, Philadelphia and New York, 1908.

Syphilis. A Treatise for Practitioners. By Edward L. Keyes, Jr., A. B., M. D., Ph. D. D. Appleton & Co., New York and London.

It has been some time since any text book on syphilis has appeared in the English language, and we doubt if any ever has evidenced more care than this, not only in its preparation, but in the effort to present a modern text to guide the profession in a field so much neglected. We are glad to note the emphatic presentation of syphilis in types as opposed to periods. The author expresses himself so: "There is no such thing as a purely secondary or tertiary period of the disease"—a proposition the reviewer has taught for seventeen years. An excellent classification of syphilis is adopted. (1) Mild early syphilis; (2) malignant early syphilis; (3) mild but persistent syphilis; (4) relapsing syphilis; (5) malignant late syphilis; (6) mild late syphilis; under these heads are described in detail the types of the disease as recognized.

A full review of the *Spirocheta pallida* is given, and the author inclines to accept this organism as the cause of the disease, or at least a phase of the organism which is the cause of syphilis.

Several introductory chapters deal with the pathology, diagnosis and general care and treatment of the victim of syphilis. Then follow in some order descriptions of the organized evidences and types of the disease, each freely presented. The book concludes with a review of accepted theories regarding hereditary syphilis.

The strong personal equation in injection everywhere in the book is a characteristic which in nowise detracts from the merit of the whole. The case references are largely drawn from the vast storehouse of the elder Keyes' practice and experience.—Dr. Dyer in *The New Orleans Medical and Surgical Journal*.

There is a novel article in *The Living Age* for November 28, in which a critic from India, Mr. Saint Nihal Sing, communicates his impressions of America, and especially of the advertising devices of the American "yellow journals."

The Living Age for December 12 prints a second article on the Problem of Aerial Navigation. It takes the form of a reply to the recent article on the same subject by Professor Simon Newcomb, and is written by Major B. Baden-Powell. It is reprinted from the latest number of the *Nineteenth Century*.

Diseases of the Skin.—By A. H. Ohmann-Dumesnil, A. M., M. E., M. D., Ph. D., etc, formerly Professor of Dermatology and Syphilology, St. Louis College for Medical Practitioners, etc. Third edition. Thoroughly revised and enlarged. 140 original illustrations. St. Louis: C. V. Mosby Medical Book and Publishing Co., 1908. 8vo. 606 pages. Cloth, \$4.00.

The author's vast experience in the specialty of Dermatology has led him to know what is known about skin diseases, as usually met with in this country. His book deals with these diseases in a clearly descriptive manner, and is

rich in diagnostic points as to diseases that have certain like signs and symptoms. While a good college text-book, it is especially valuable to the general run of practitioners who have to deal with skin diseases. The sections on treatment refer to the best of preparations that may usually be found in any up-to-date pharmacy. Formulae of useful combinations are plentiful. The illustrations throughout the book—many of them new and graphic—are well chosen for the purposes of showing the appearance of different diseases of the skin.

Surgical Memoirs.—By James G. Mumford, M. D., Instructor of Surgery, Harvard Medical School; Visiting Surgeon to the Massachusetts General Hospital; Fellow of the American Surgical Association, etc. Illustrated, \$2.50 net.

In this volume of collected essays, Dr. Mumford reproduces many of his papers and addresses of the last ten years, and adds some material hitherto unpublished. Mainly, the author deals with the History and Philosophy of Medicine.

The first essay is a narrative sketch of the History of Surgery, and embraces accounts of the great heroes of that art: Hippocrates, Galen, Vesalius, Pare, Haller, John Hunter and Lister.

Then follows a paper, summing up ancient surgical accomplishments; succeeded by biographical essays on Cooper, Brodie, J. C. Warren, Bigelow. The remaining papers in the book are fugitive essays; accounts of special American achievements in medicine; a critical and historical essay on aneurism; addresses to nurses; and short papers on ethics and on medical education.

Pathogenic Micro-Organisms, Including Bacteria and Protozoa.—A Practical Manual for Students, Physicians and Health Officers. By William H. Park, M. D., Professor of Bacteriology and

Hygiene in the University of Bellevue Hospital Medical College, New York. New (third) edition, thoroughly revised and much enlarged. Octavo, 648 pages, with 176 illustrations and 5 full-page plates. Cloth, \$3.75 net. Lea & Febiger, Philadelphia and New York, 1908.

Dr. Park was the first to give concrete recognition in book form to the fact that diseases caused by animal organisms are almost as important to the human race as those resulting from low forms of vegetable life. It is true that the pathogenic bacteria, representing the vegetable kingdom, are more numerous than the disease-bearing protozoa, or animalcules, and it is also true that the latter are more difficult to cultivate and demonstrate, but no reason can justify ignoring them. Professor Park, perceiving this deficiency, supplied it in the most effective manner by preparing chapters on the protozoa and placing them with others on bacteria in a single volume, where they could be studied together, both in similarity and contrast. His work was thus the first to cover all diseases caused by micro-organisms. The need for it and the acceptable way it supplies that need may be seen in the demand for three editions. In a subject of such intense activity, growth is very great, and accordingly the changes in this new edition are extremely thorough-going. Like its predecessors, it is intended to answer the needs of the student and physicians to cover the whole subject of pathogenic micro-organisms from both standpoints.

Arterio-Sclerosis.—Etiology, Prognosis, Prophylaxis and Treatment. By Louis M. Warfield, A. B., M. D., Instructor in Medicine, Washington University Medical Department. With an introduction by W. S. Thayer, M. D., Professor of Clinical Medicine, Johns Hopkins University. Illustrated. Cloth, pp. 165. St. Louis, 1908: C. V. Mosby Medical Book Co. Price, \$1.50.

There can be but little question that our modern methods of living bring about early decay of the arterial system.

Warfield has given, in this volume, an excellent and practical essay on arterio-sclerosis—a work which unquestionably merits consideration and which will be favorably received by the medical profession.

Therapeutics of the Circulation.—Eight Lectures Delivered in the Spring of 1905 in the Physiological Laboratory of the University of London. By Lauder Brunton, Kt., M. D., D. Sc., LL. D., F. R. C. P., F. R. S. Published under the auspices of the University of London. Illustrated, pp. 280, price \$1.50 net. Philadelphia, 1908: P. Blakiston's Son & Co.

This book is the best of the boiling on this subject. The shorthand notes of these lectures of '85 have been reissued by the author and are up-to-date (1908). The book is a treasure at three times the price.

To those who are familiar with the splendid work of Sir Lauder Brunton—and every educated physician must be to a greater or less extent—it is not necessary to say anything as to the merit of this volume. In the few lines which are permitted for this review, there can be no more satisfactory way of describing the book than by stating the scope of the eight lectures which make it up. The first lecture deals with the Physiology of Circulation; the second and third deal with the diagnosis of diseases of circulation and the latter carries us into the pathology of circulation; the fourth lecture deals with general circulatory disturbances and starts us on the valvular diseases of the heart; the fifth lecture continues valvular disease and discusses the treatment. Chapter six dwells upon the drug treatment of circulatory disorders, while the seventh chapter carries us from the effects of tobacco through several of the minor circulatory diseases. The last chapter deals with a number of practical subjects

bearing upon the diseases of the heart and circulation.

The work is thoroughly illustrated and is written in a particularly readable style.

Gonorrhea in Women.—By Palmer Findley, M. D., Professor of Gynecology in the College of Medicine of the University of Nebraska, Omaha. Octavo, cloth, pp. 112, \$1.50. St. Louis, 1908: C. V. Mosby Medical Book and Publishing Company.

The notes of this book are from the *Chicago Clinic*. The book is brief; it is not speculative or didactic; it is practical. The author has done much acceptable work in his chosen field, but it is doubtful if he has produced anything of more practical value than the volume we have before us. Gonorrheal infection is of the utmost importance in gynecologic conditions and yet, in no other work in either America or foreign medical literature, has the subject been taken up in its entirety as has been done in this work by Findley.

The arrangement is excellent. The various forms of gonorrheal infection are taken up by anatomical regions in the natural order: Gonorrhea of the urethra, vulva, vagina, fallopian tubes, ovaries, peritoneum and of the anus and rectum; while gonorrheal septice-mia and pyemia, gonorrheal endocarditis and gonorrheal arthritis are assigned to a secondary place.

There is much in Findley's book which is entirely original and, where he has deemed it wise to employ the ideas of others, the author has followed the wise course of employing the exact language of the authorities quoted. In this way he avoids the far too common misrepresentation of the views of others.

The work is very complete, and, in addition to the thoroughness of the text, there is an excellent bibliography covering the entire literature of the subject.

This book makes practical the research work of Bernheim, Forrell and

DuBoise and fits their work for everyday practice.

A Hand-Book of Suggestive Therapeutics, Applied Hypnotism, Psychic Science.—By Henry S. Munro, M. D., Americus, Georgia. Second edition. Cloth, pp. 353, illustrated. St. Louis, 1908: C. V. Mosby Medical Book and Publishing Company. \$3.00.

Psychic science and hypnotism are vague and indefinite subjects concerning which many writers have written many volumes of speculative stuff, the vast majority of which has been entirely void of practical merit. Munro, on the other hand, has approached the subject from the practical side. He has laid aside idle dreaming and has shown briefly and clearly just what there is in hypnotism that the general practitioner can employ, and just how he can employ it.

Electrical Treatment.—By Wilfred Harris, M. D., F. R. C. P., Physician to the Department of Nervous Diseases, St. Mary's Hospital, London. Illustrated. Chicago: W. T. Keener & Co., 1908. Price, \$2.00.

This is a good book for the general practitioner using the various forms of electricity. There is no better or neater manual for this purpose. Only 75 pages are devoted to use and technique of X-ray and static electricity. The author's purpose is to help the doctor to "take the current when it serves lest we lose our ventures," or at least lose our patients to some one who has mastered this book.

A Text-Book of Pathology.—By Alfred Stengel, M. D., Professor of Clinical Medicine in the University of Pennsylvania. Fifth revised edition. Octavo of 977 pages, with 399 text-illustrations, many in colors, and 7 full-page colored plates. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, \$5.00 net; half morocco, \$6.00 net.

Stengel's treatise is certainly a favorite among our teachers of pathology in

the Indiana Medical College, and this is high praise, as several of them are capable of writing allied works themselves. Given a logical mind, an intense love of biological science, a natural sense of classification and sufficient incentive, and any young teacher can write a book on a medical subject. Indianapolis medical teachers have written several excellent works in the last five years. But to Stengel all our teaching pathologists take off their hats. He has a direct and simple style and is never prosy or wearisome. Five editions in less than ten years indicate the value and popularity of Dr. Stengel's work to the student and physician. The present work has been revised to date, notably the chapters on Inflammation of Something and Animal Parasites.

E. B. Treat & Co., Medical Publishers, New York, announce, in press, for early publication, the following works:

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One pronounced clinical symptom referable to the pulse, according to a prominent English authority, will moreover be found in puberal anemia, which is not common in chlorosis. In anemias of failing quantity, such as puberal anemia, the pulse is almost invariably feeble and empty, while in chlorosis it is often dull and even of quite excessive pressure.

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It goes without saying that the best of hygiene, good food and as much outdoor life as possible should also be prescribed in the treatment of puberal anemia. The condition if allowed to continue is always dangerous, principally because of its predisposing tendencies to graver disease; but the results of the treatment recommended are usually so prompt and decisive that there is rarely any excuse for its not being controlled. At any rate "It is the stitch in time" that saves serious trouble, and Pepto-Mangan (Gude) in this class of cases will be found a very dependable stitch.

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mind the prevalence of lung and bronchial diseases, cod-liver oil's possibilities as a food and tonic for convalescents from pneumonia and other acute respiratory ailments should not be overlooked. Few diseases leave a patient so utterly broken down and so susceptible to a still graver disease as do these acute infections of the lungs and bronchi. Judicious care and a properly chosen therapeutic regimen, during the several weeks immediately following a pneumonia, may determine the difference between complete recovery and the grafting on of a tubercular process.

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portant organ's function, its value will be vitiated by the harm done to the gastric apparatus.

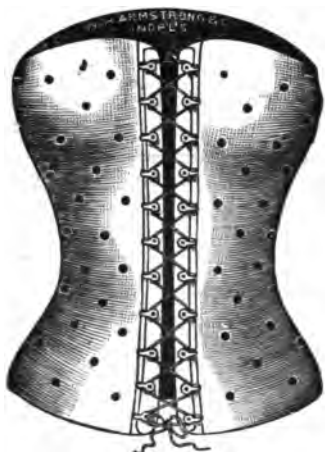
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dermically in twenty grain doses, every two hours, up to sixty or eighty grains of the hydrochlorate of quinine and urea. Post-febrile toxemia is common and important. Forty per cent. of cases develop albuminuria which in general clears up, but when this is not the case results in a chronic interstitial nephritis. Kidney symptoms and very low tension pulse indicate acute toxemia. This is more often the case in the colored than in the white race.—*Medical Record*, November 21, 1908.

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